Oki Data CONFIDENTIAL

OKI

C5300/C5100
Color LED Page Printer

Technical Reference

ODA/OEL/INT

2003-03-14 Rev.2

History of Revision

Rev.No.	Date	Corrected items			Person in charge
		No.	Page	Description of change	
1	2003-02-20			Issue	CN45 Hatakeyama
2	2003-03-14				CN45 Hatakeyama

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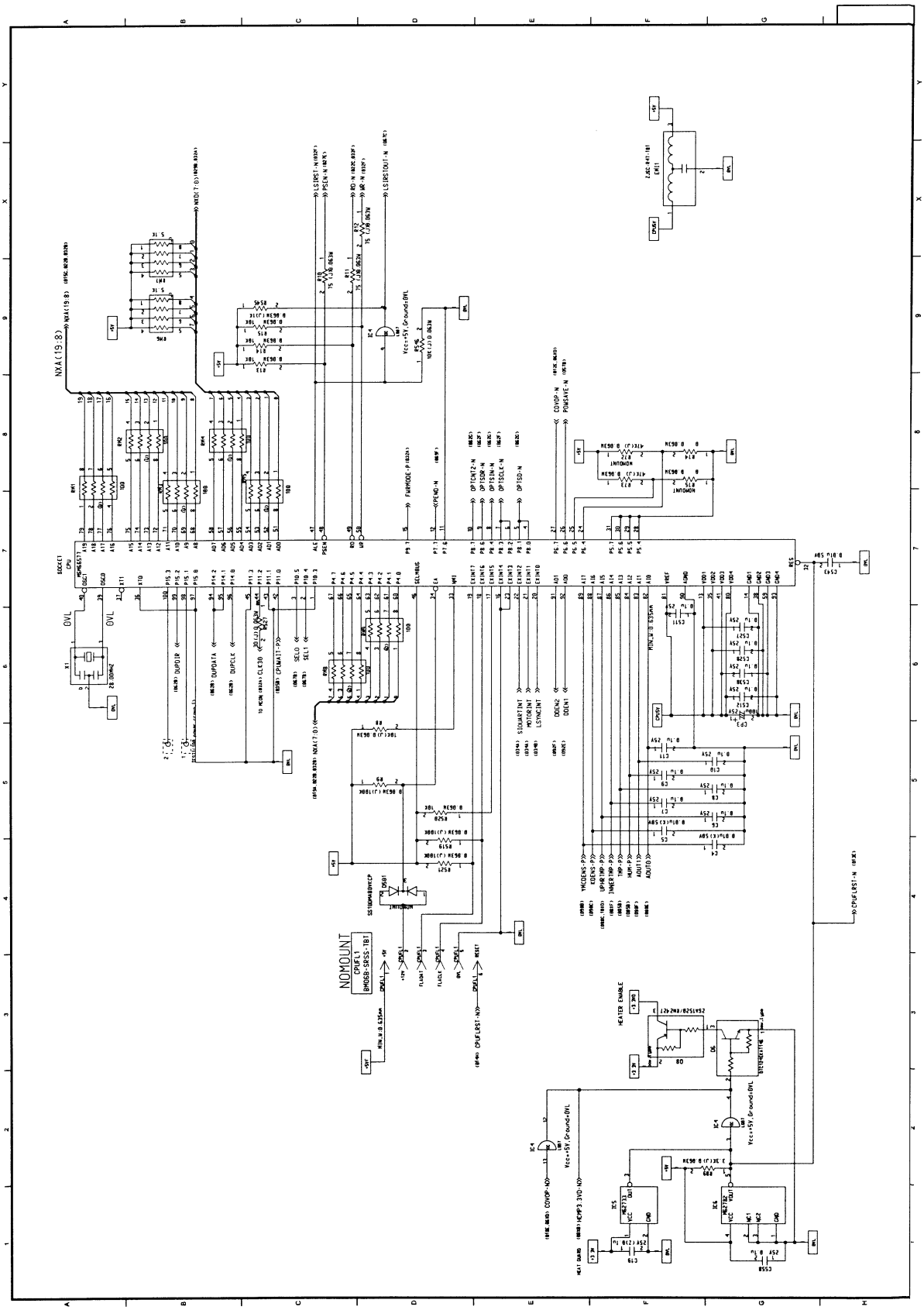


Figure 1-1 Print Engine Controller PWB (RSN Rev.5) (1/10)

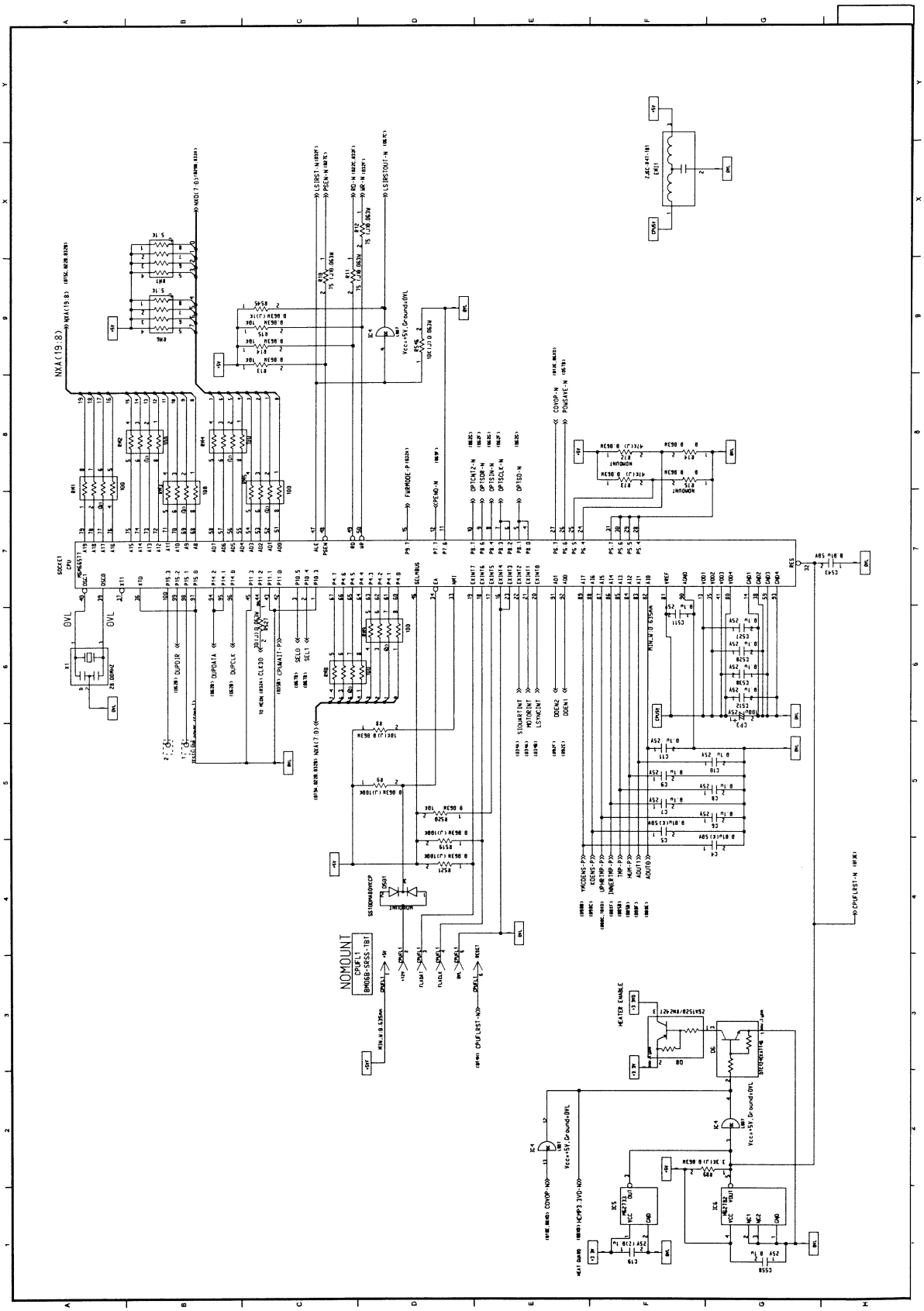


Figure 1-1 Print Engine Controller PWB (RSN Rev.5) (1/10)

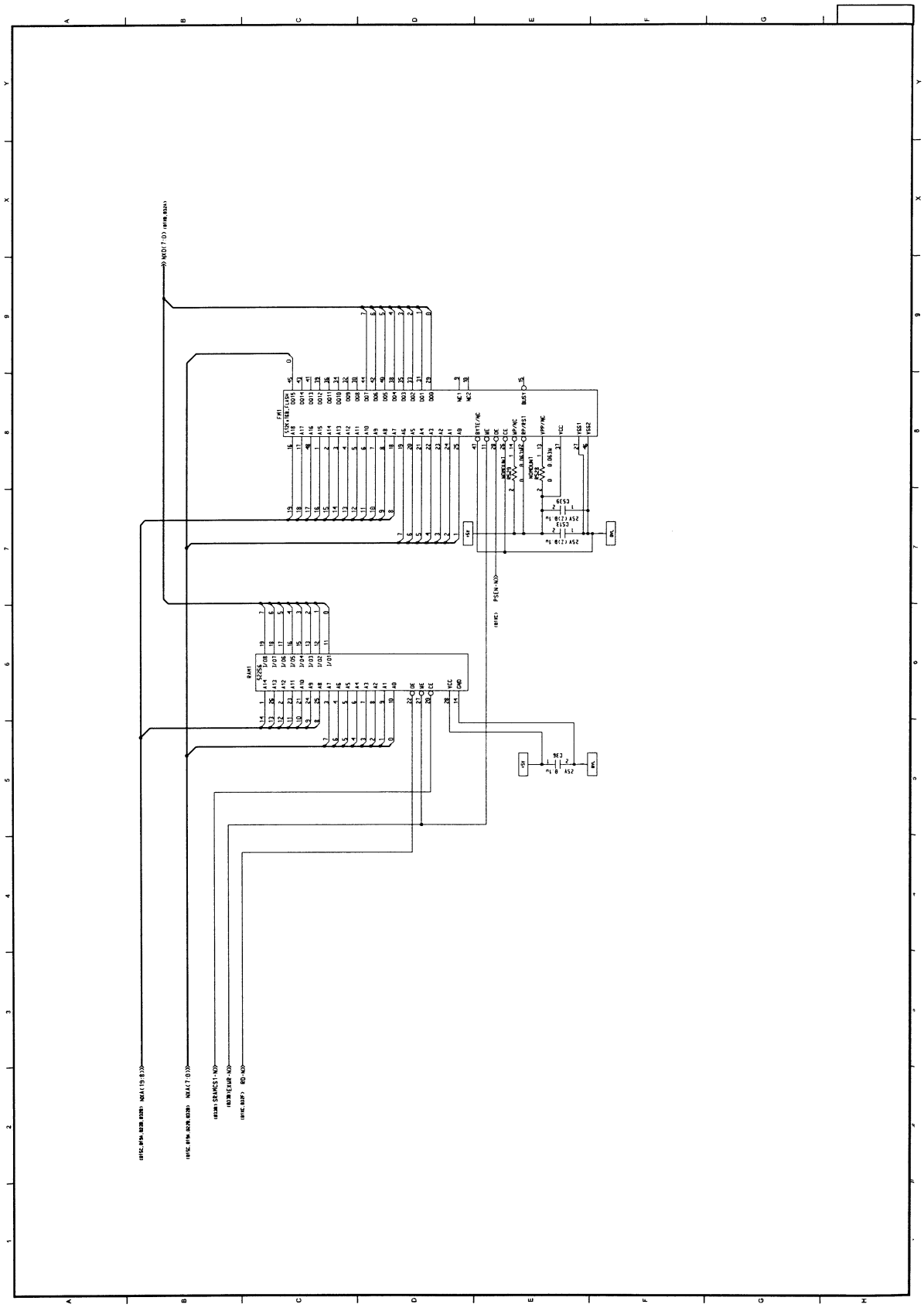


Figure 1-1 Print Engine Controller PWB (RSN Rev.5) (2/10)

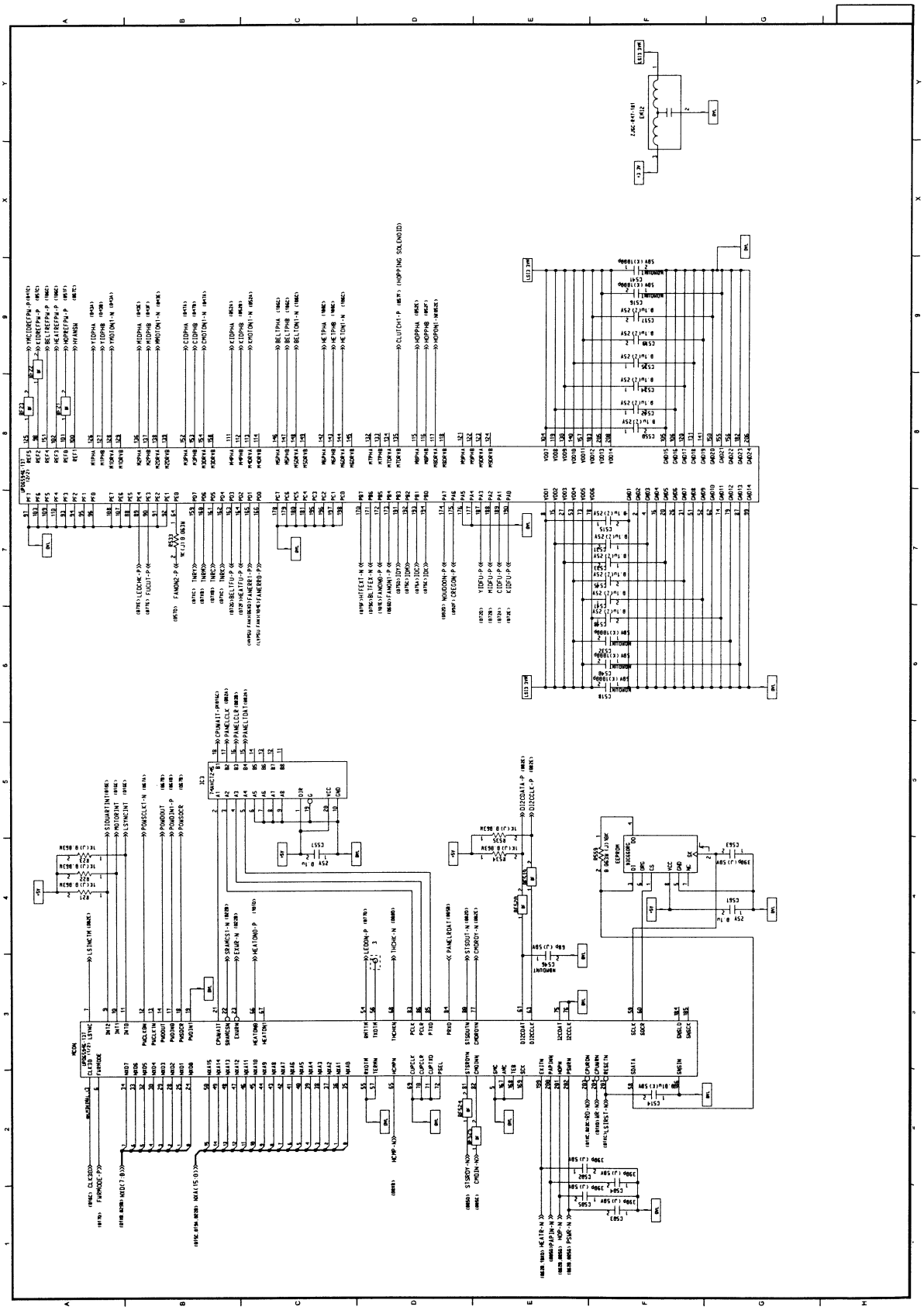
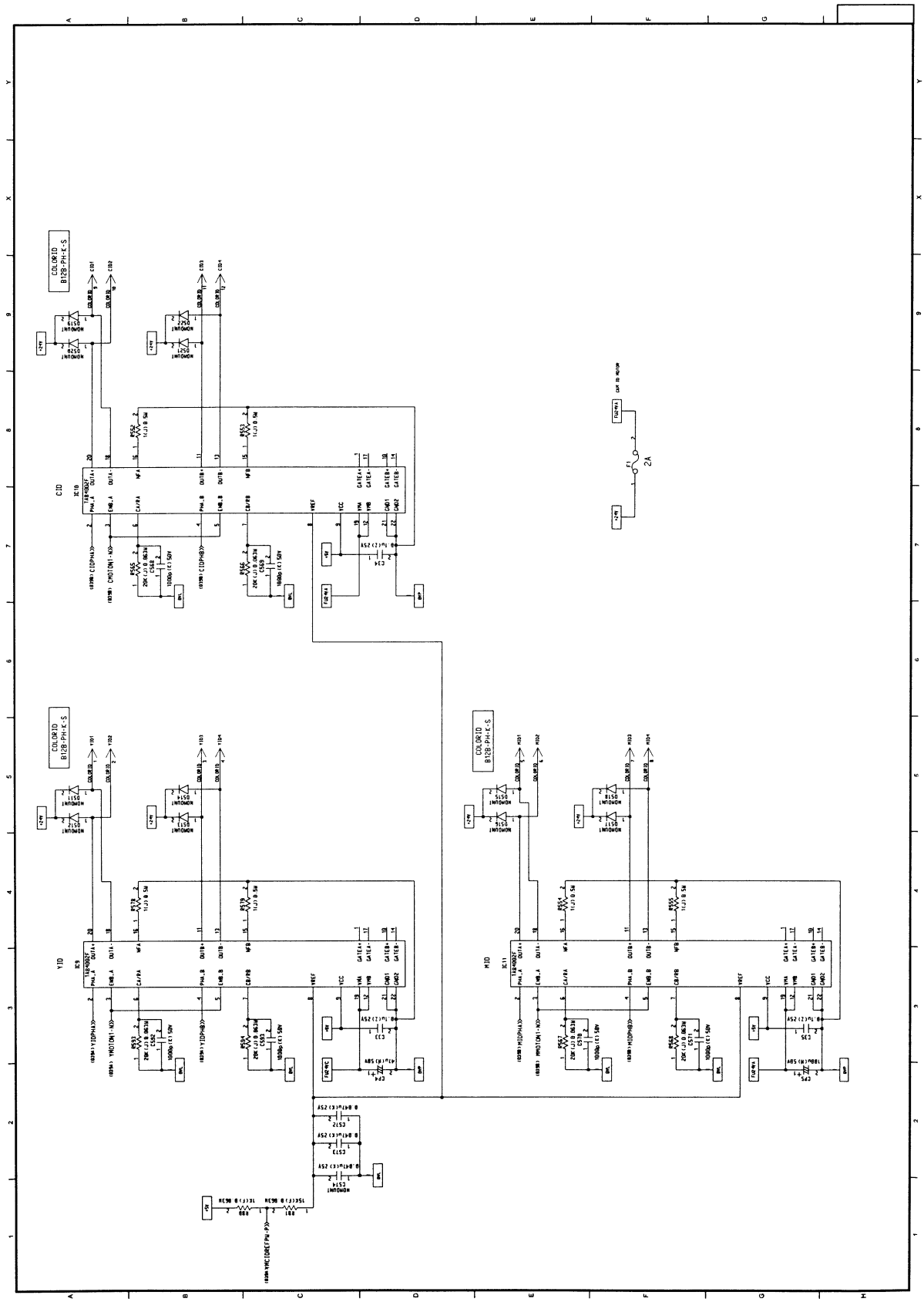


Figure 1-1 Print Engine Controller PWB (RSN Rev.5) (3/10)



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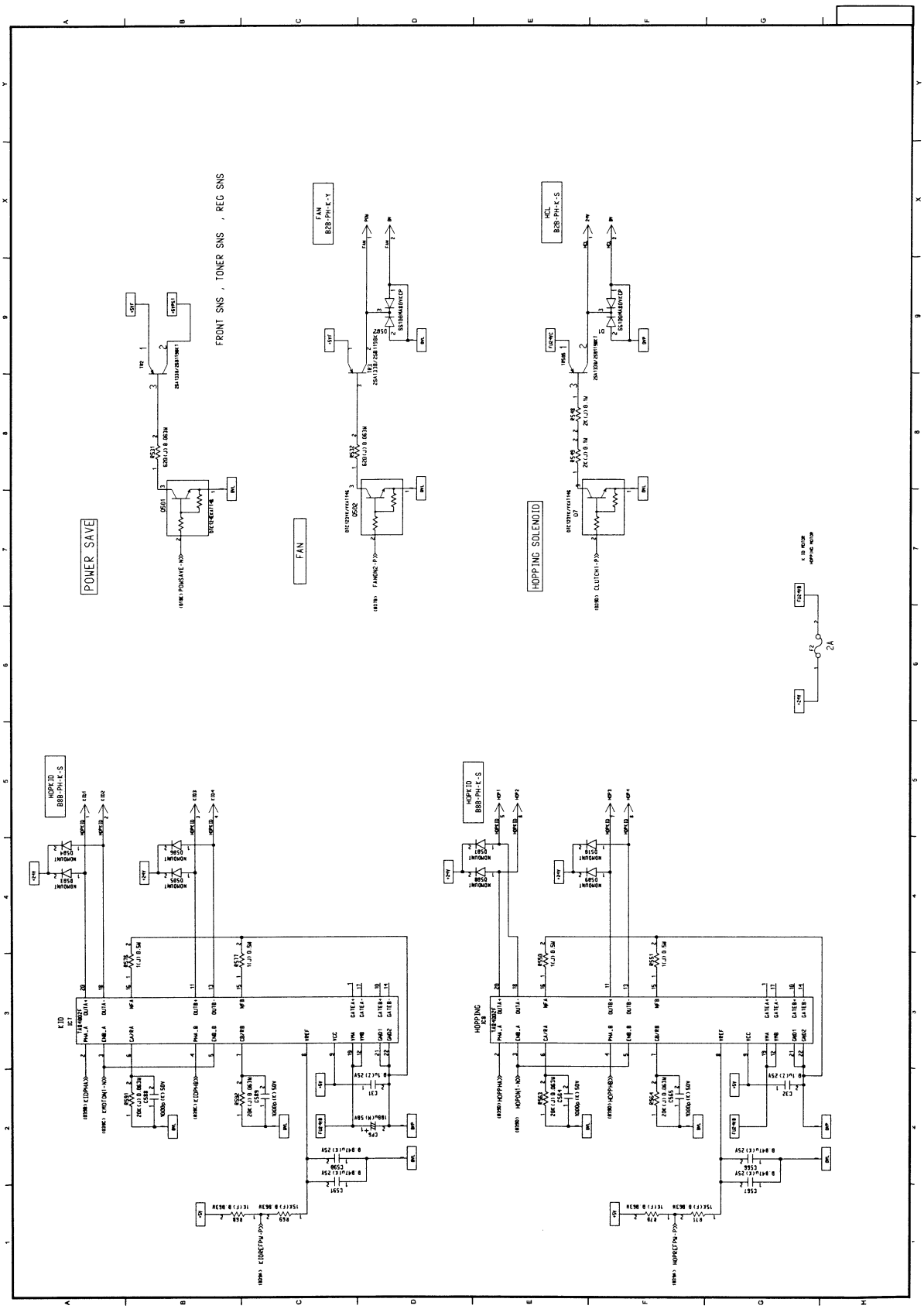

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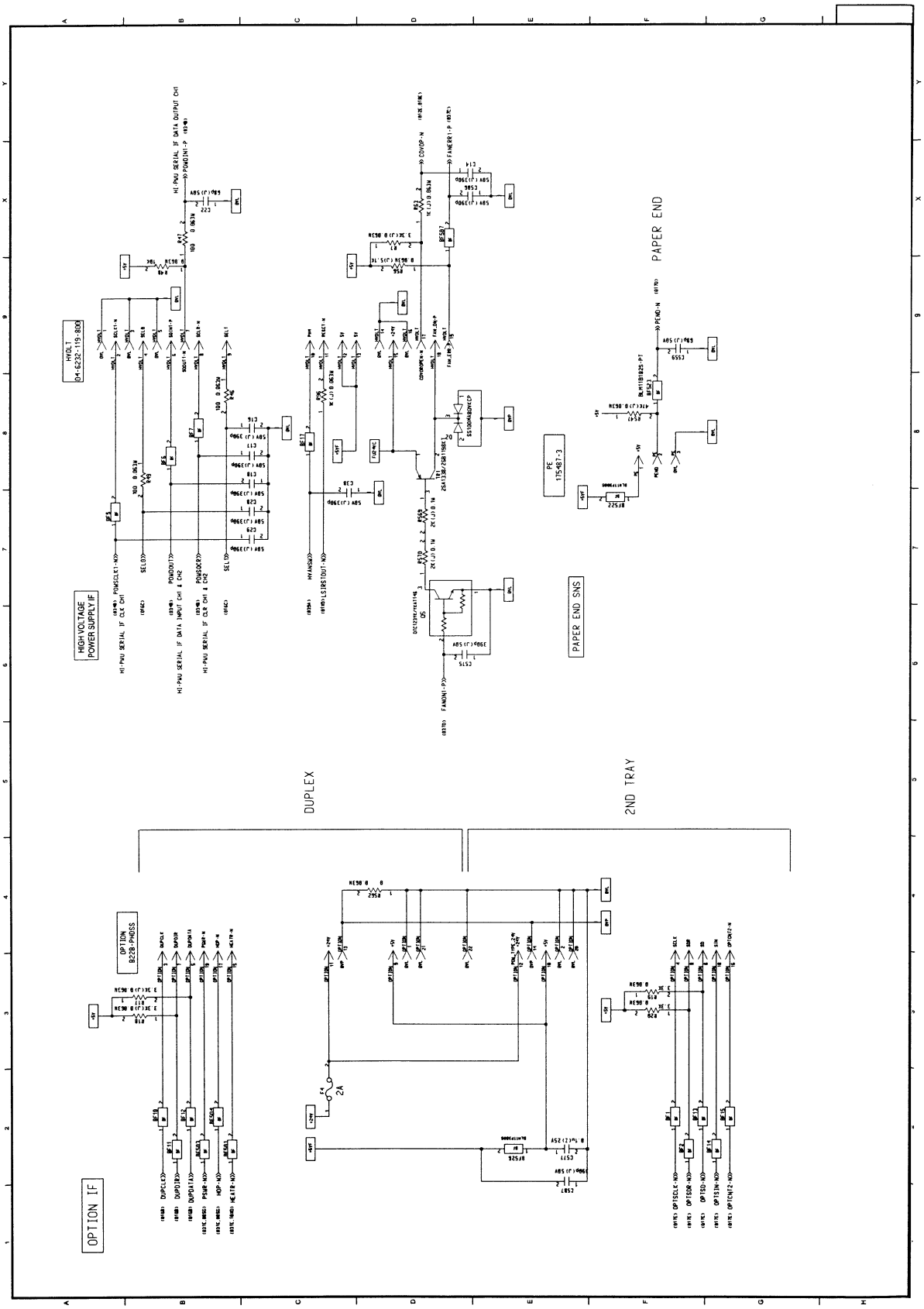

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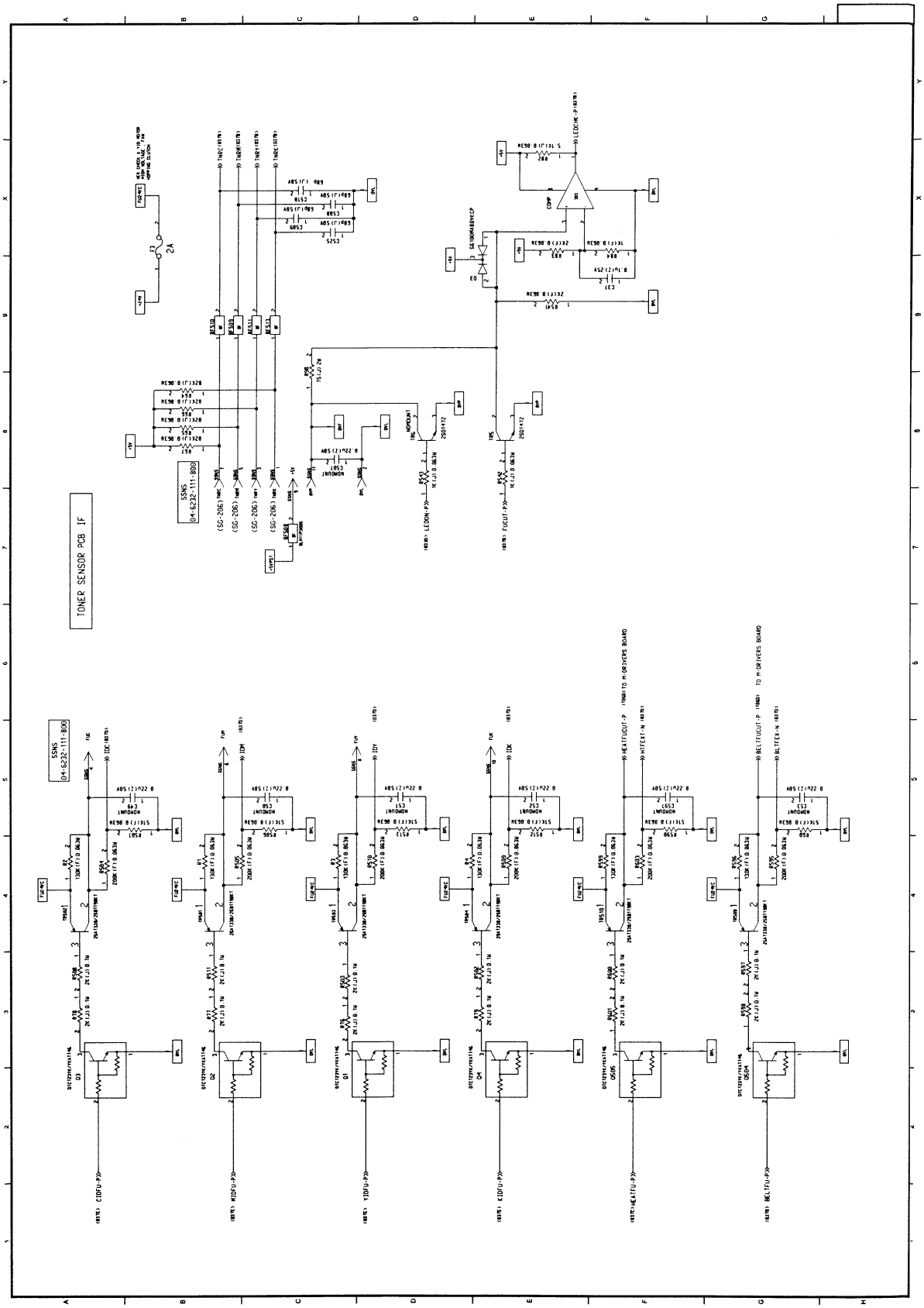


Figure 1-1 Print Engine Controller PWB (RSN Rev.5) (7/10)

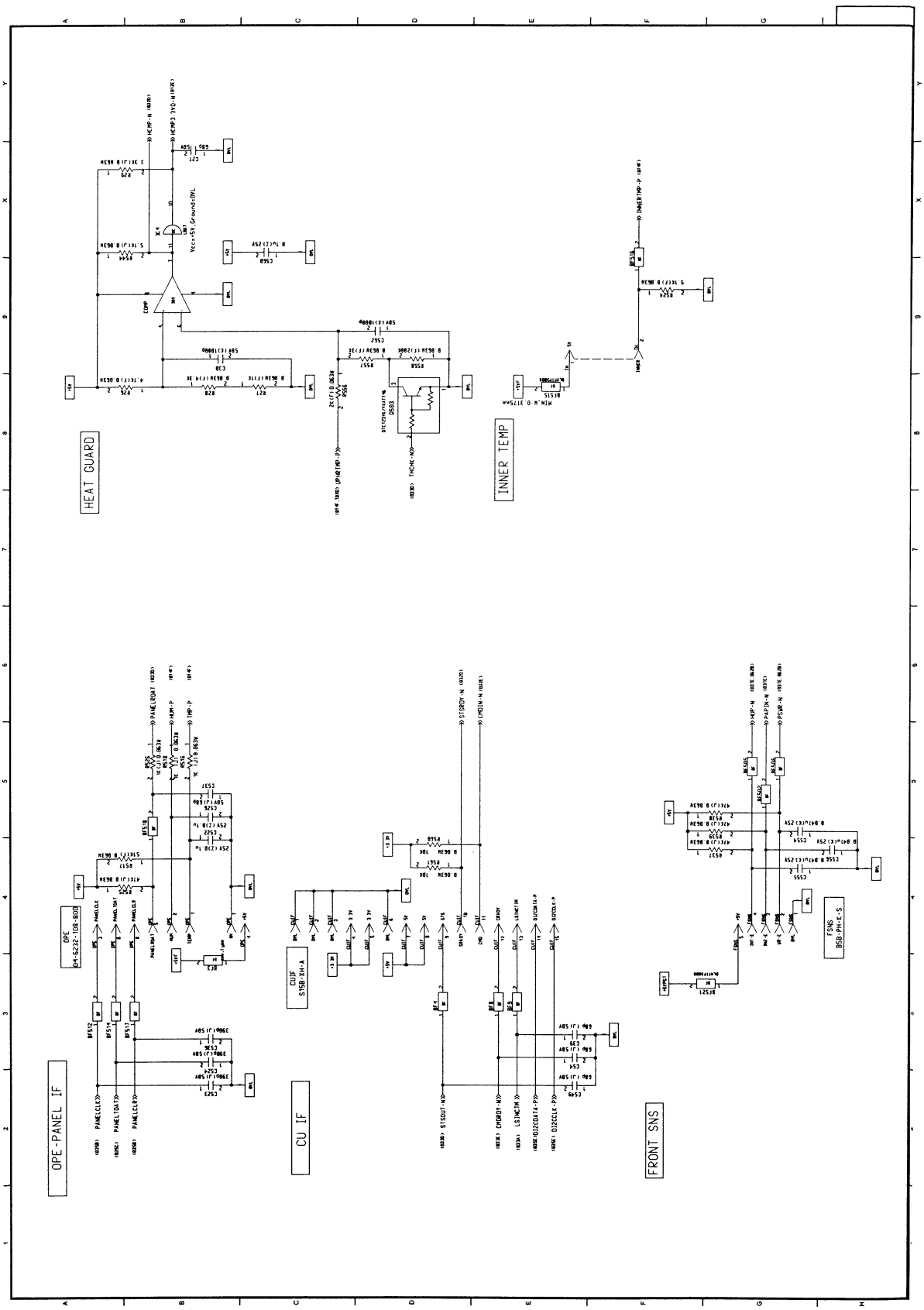
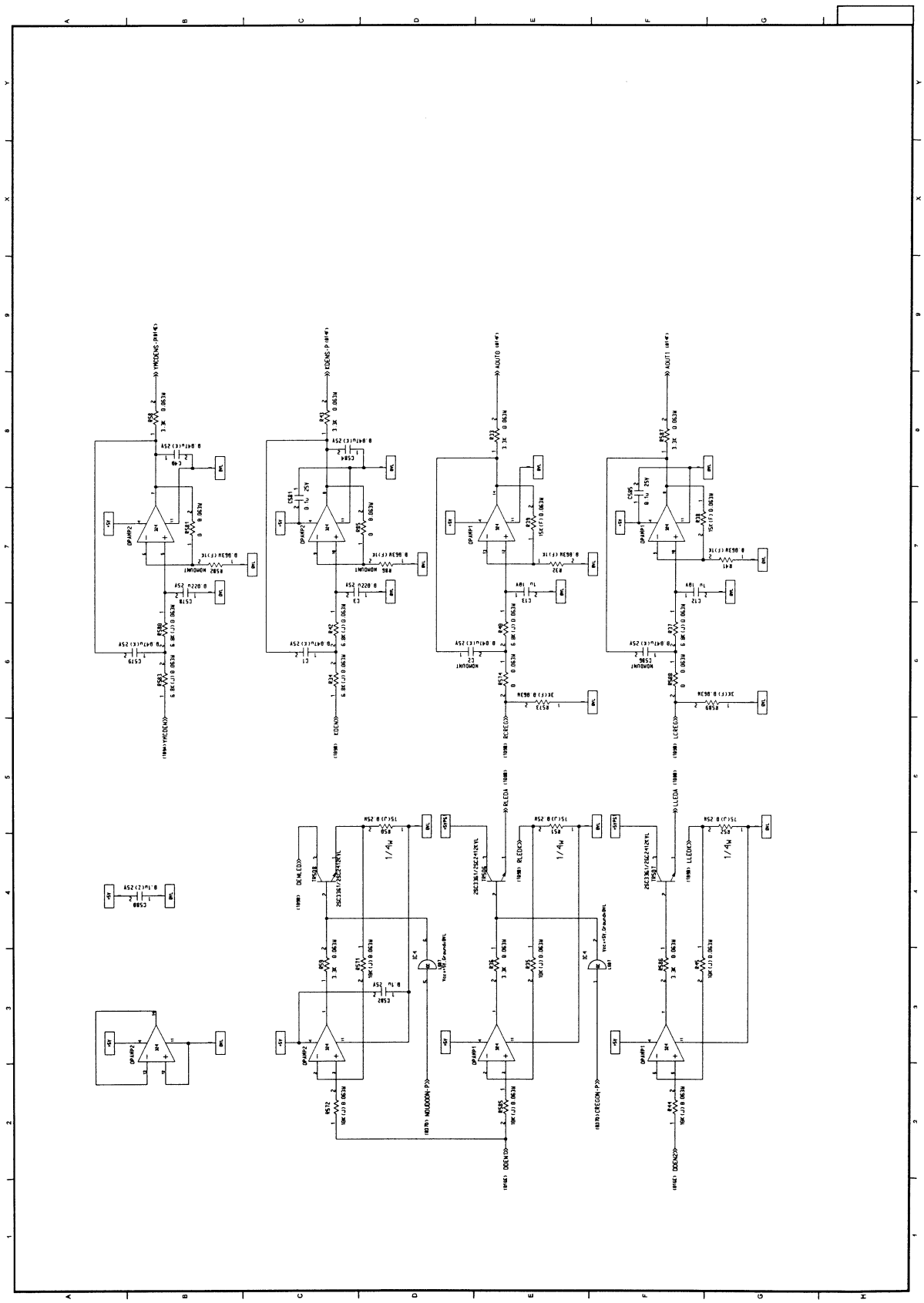


Figure 1-1 Print Engine Controller PWB (RSN Rev.5) (8/10)



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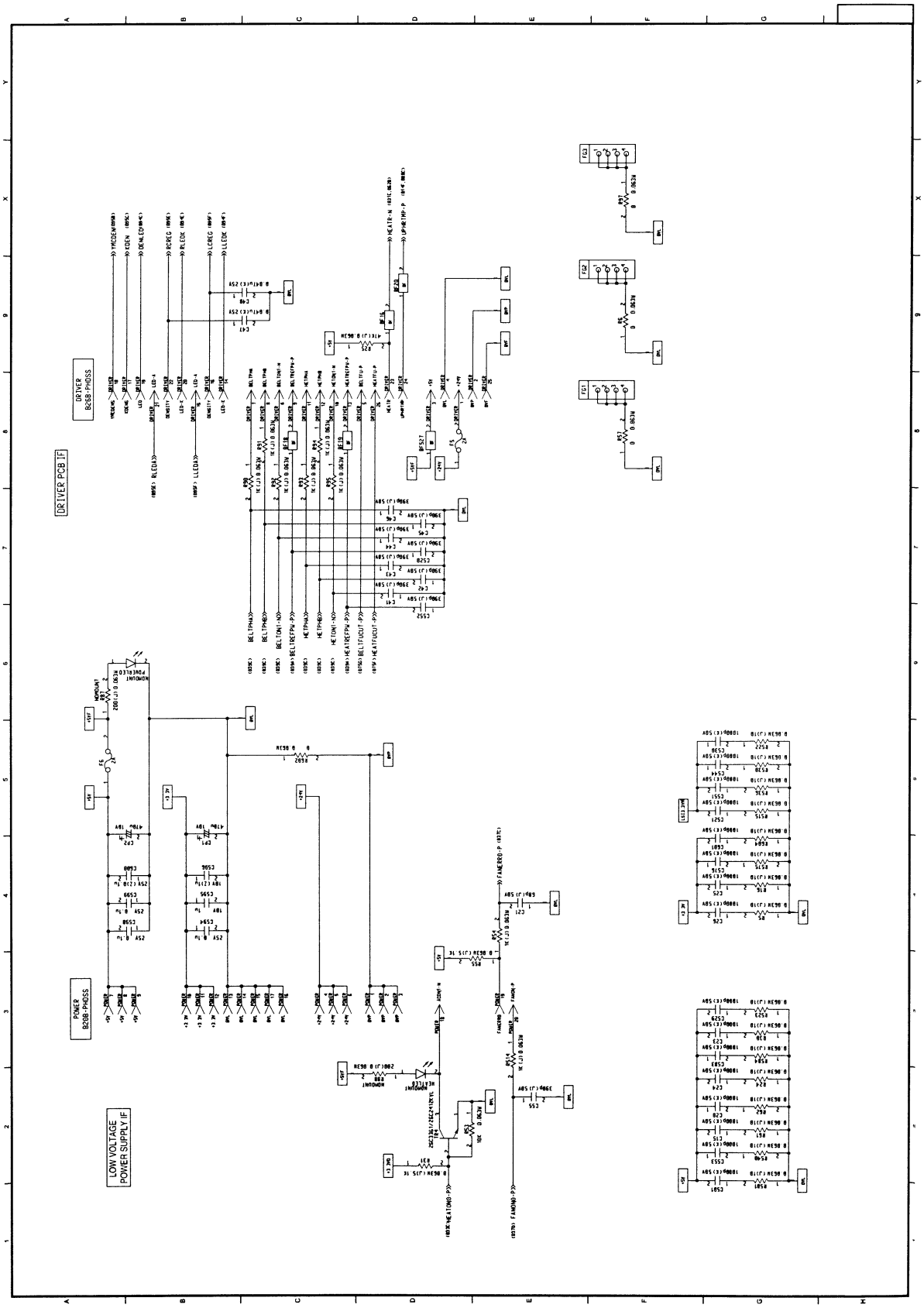


Figure 1-1 Print Engine Controller PWB (RSN Rev.5) (10/10)

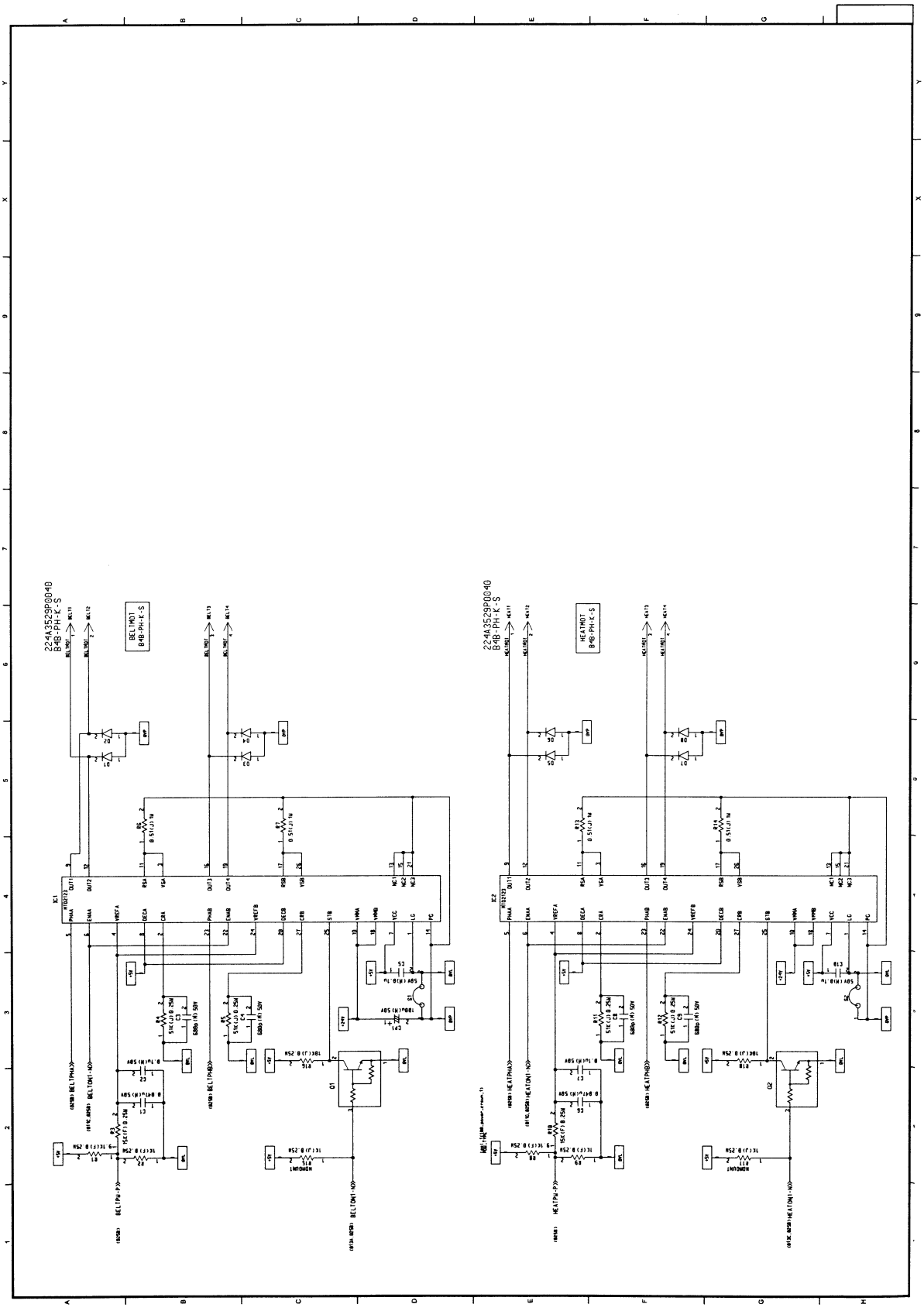


Figure 1-2 Driver PWB (RSM Rev.3) (1/2)

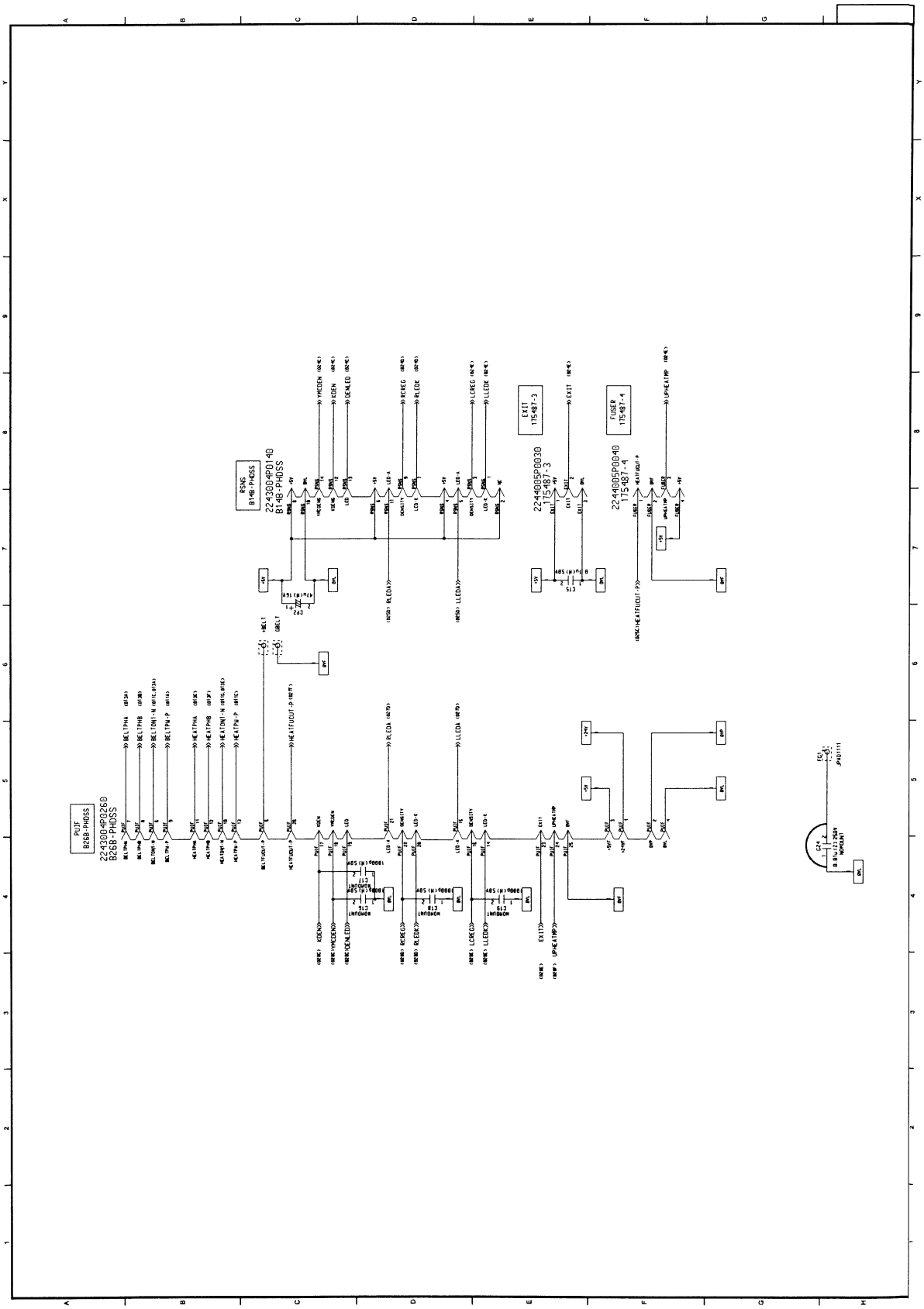


Figure 1-2 Driver PWB (RSM Rev.3) (2/2)

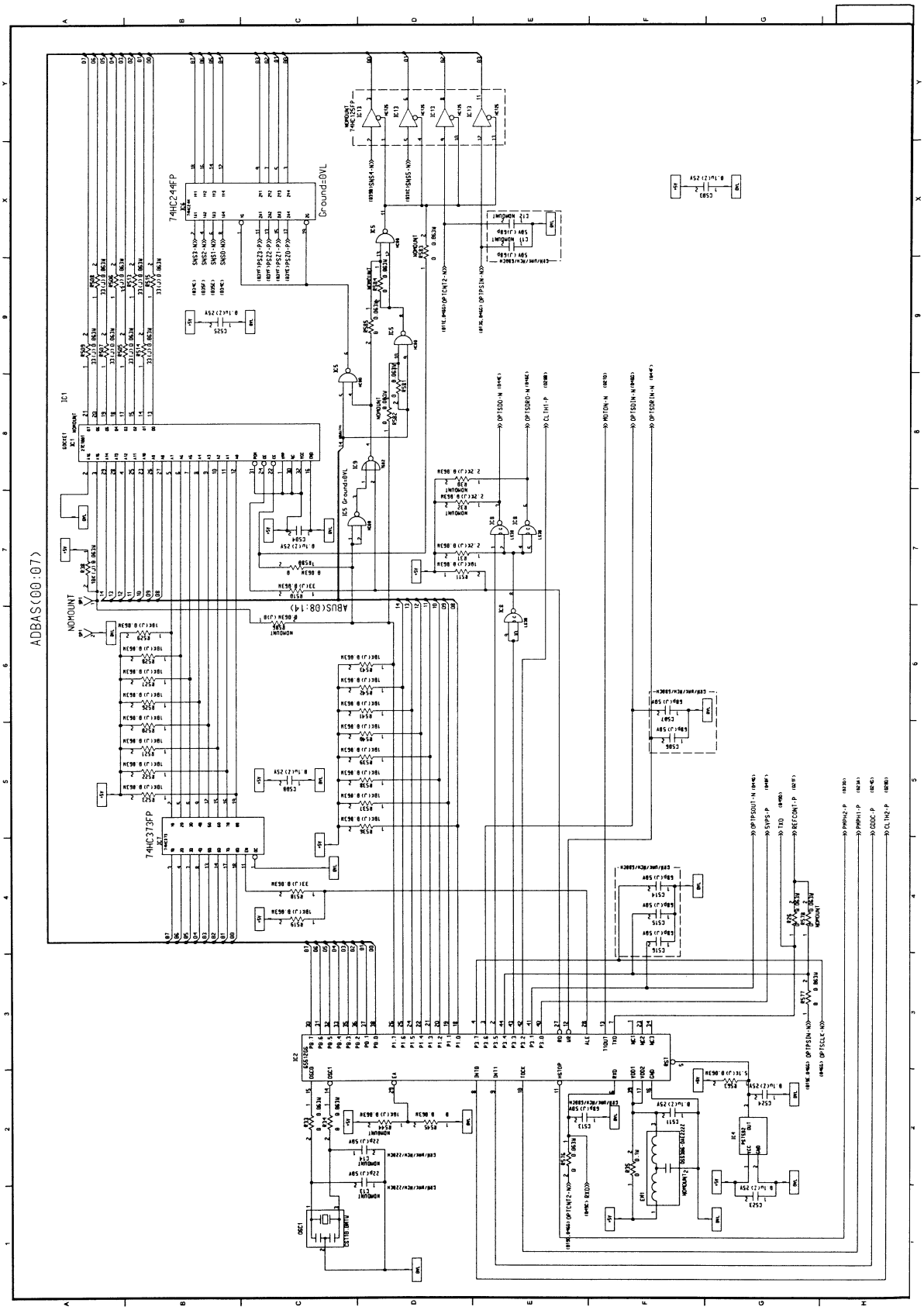


Figure 1-3 Option Control PWB (V7X Rev.1) (1/4)

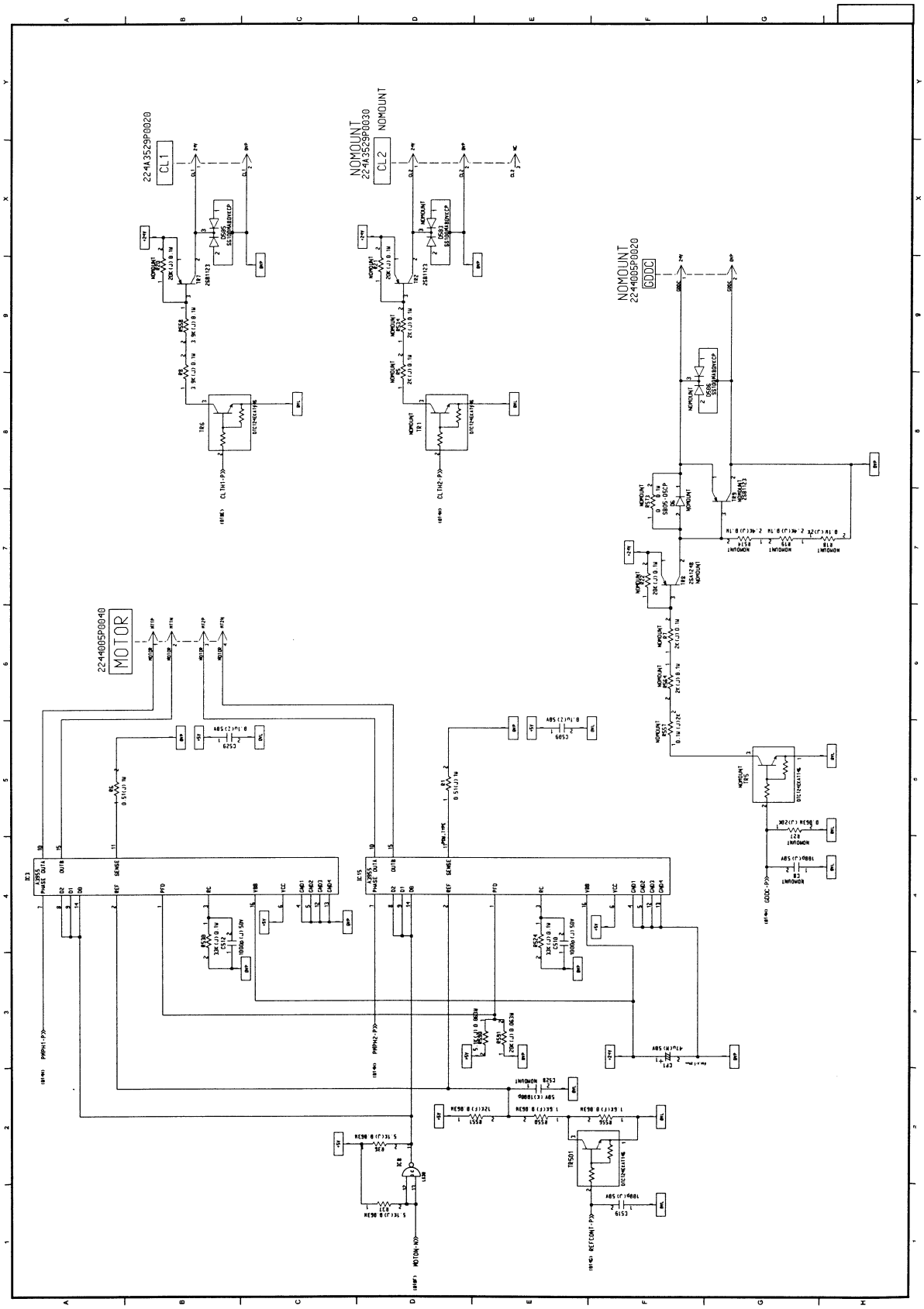


Figure 1-3 Option Control PWB (V7X Rev.1) (2/4)

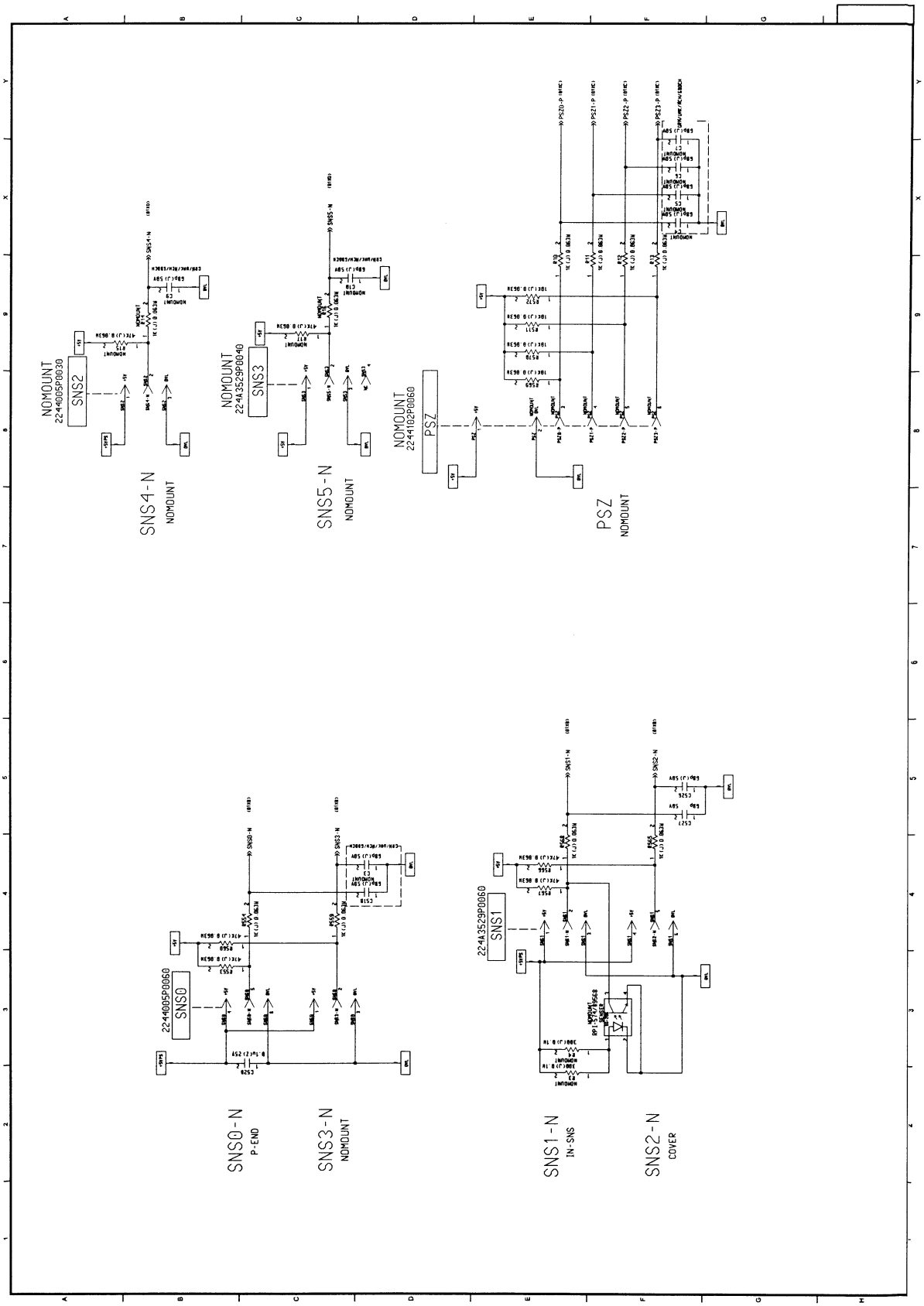


Figure 1-3 Option Control PWB (V7X Rev.1) (3/4)

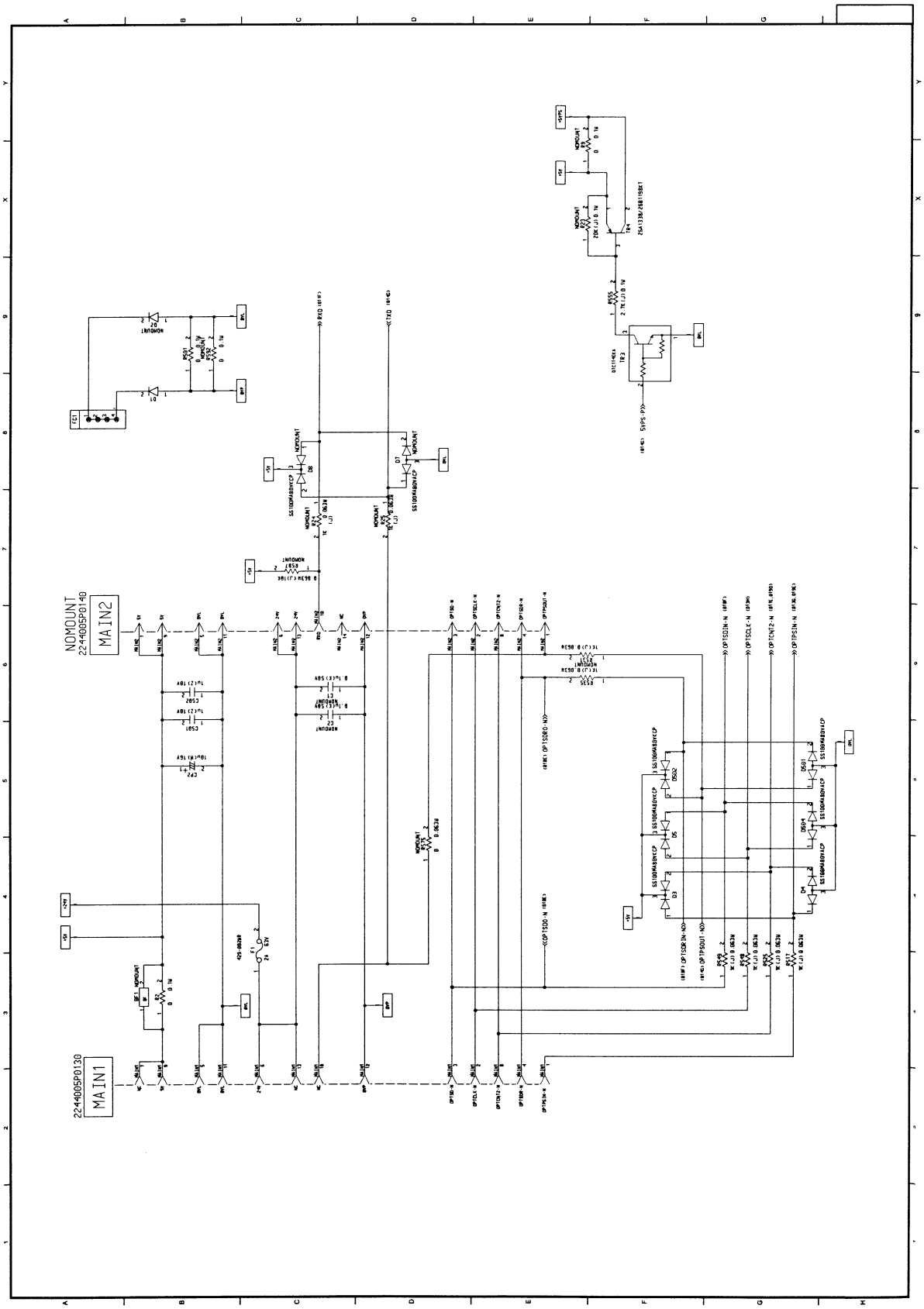


Figure 1-3 Option Control PWB (V7X Rev.1) (4/4)

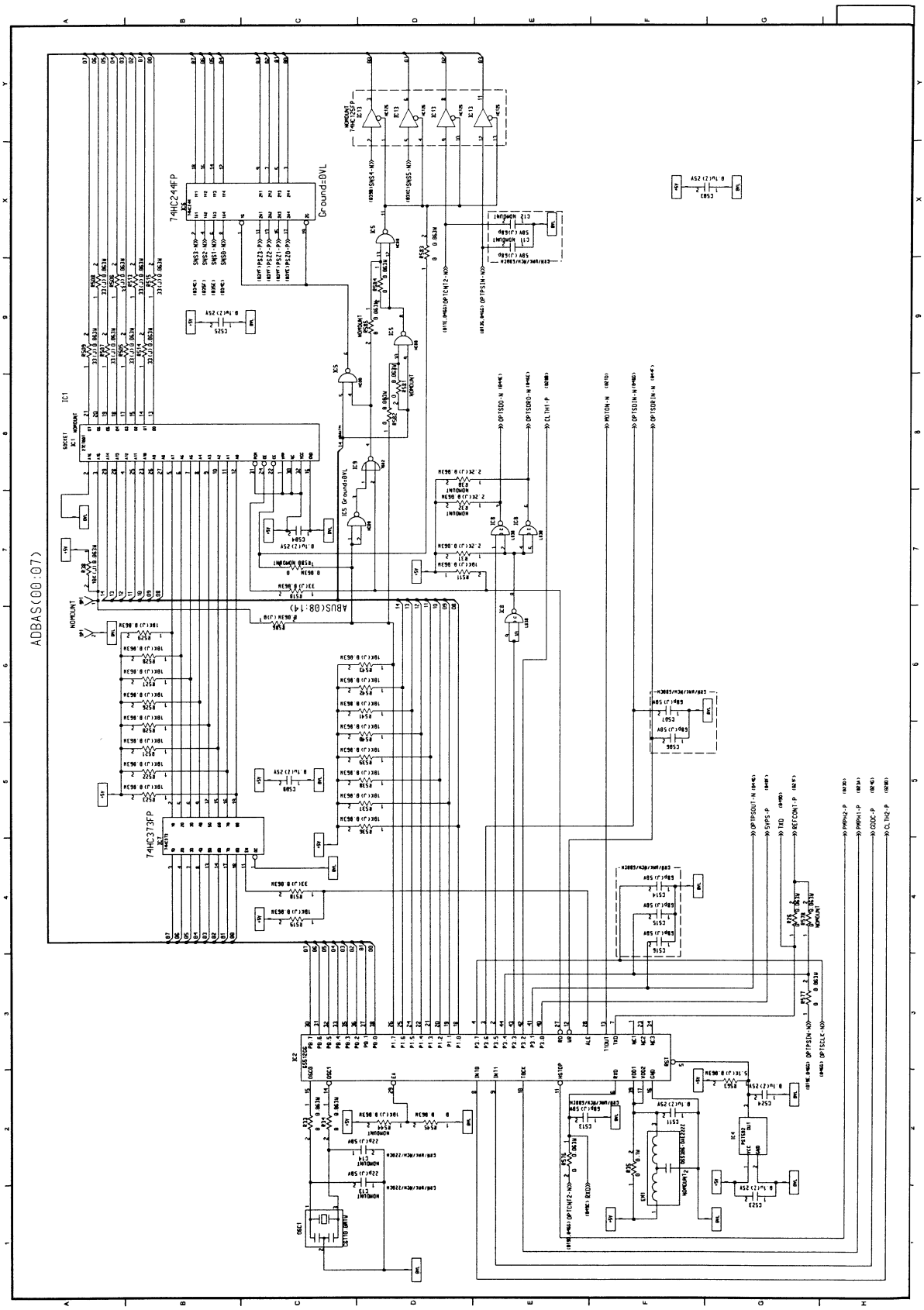


Figure 1-4 Duplex Control PWB (V7X Rev.1) (1/4)

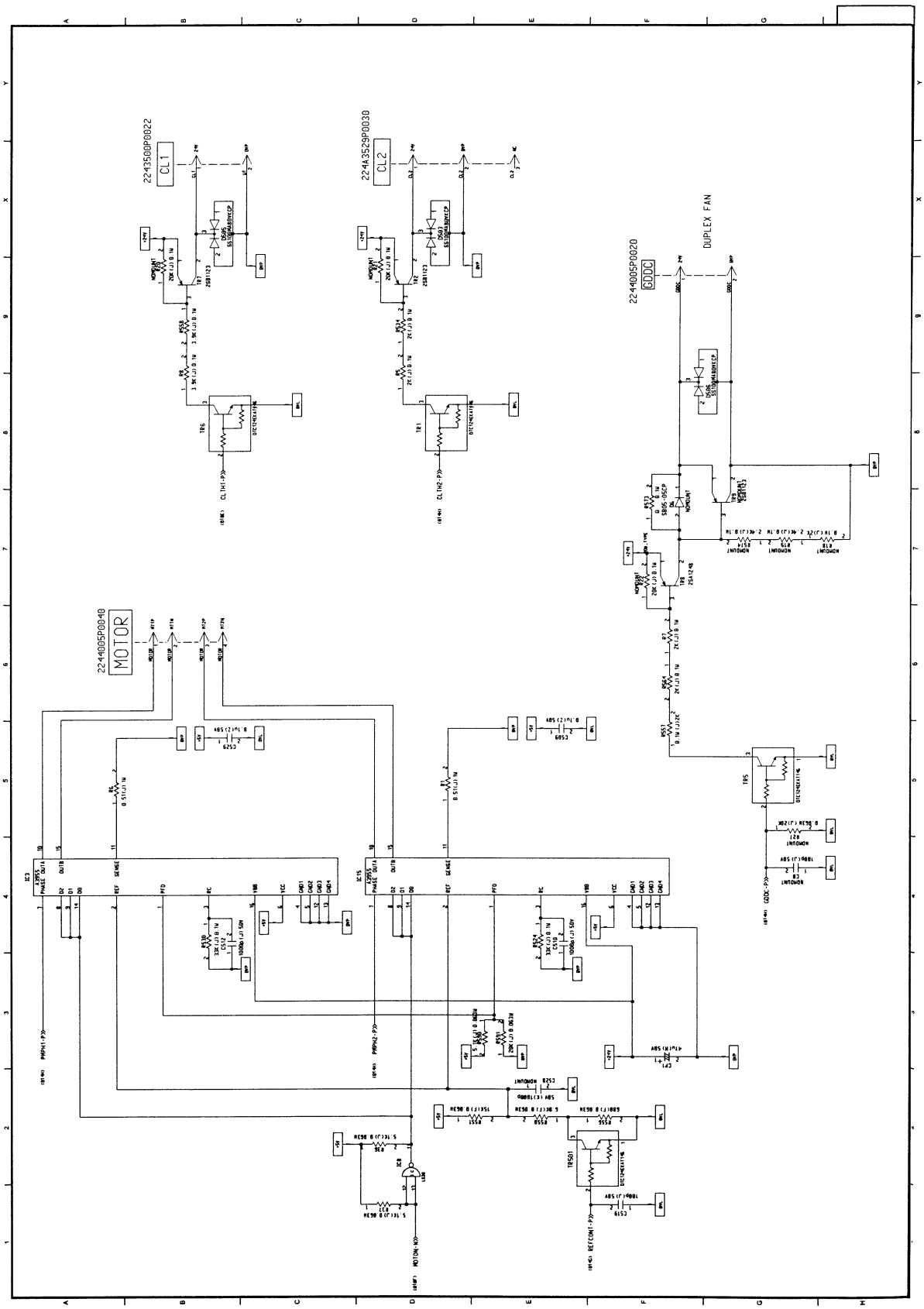


Figure 1-4 Duplex Control PWB (V7X Rev.1) (2/4)

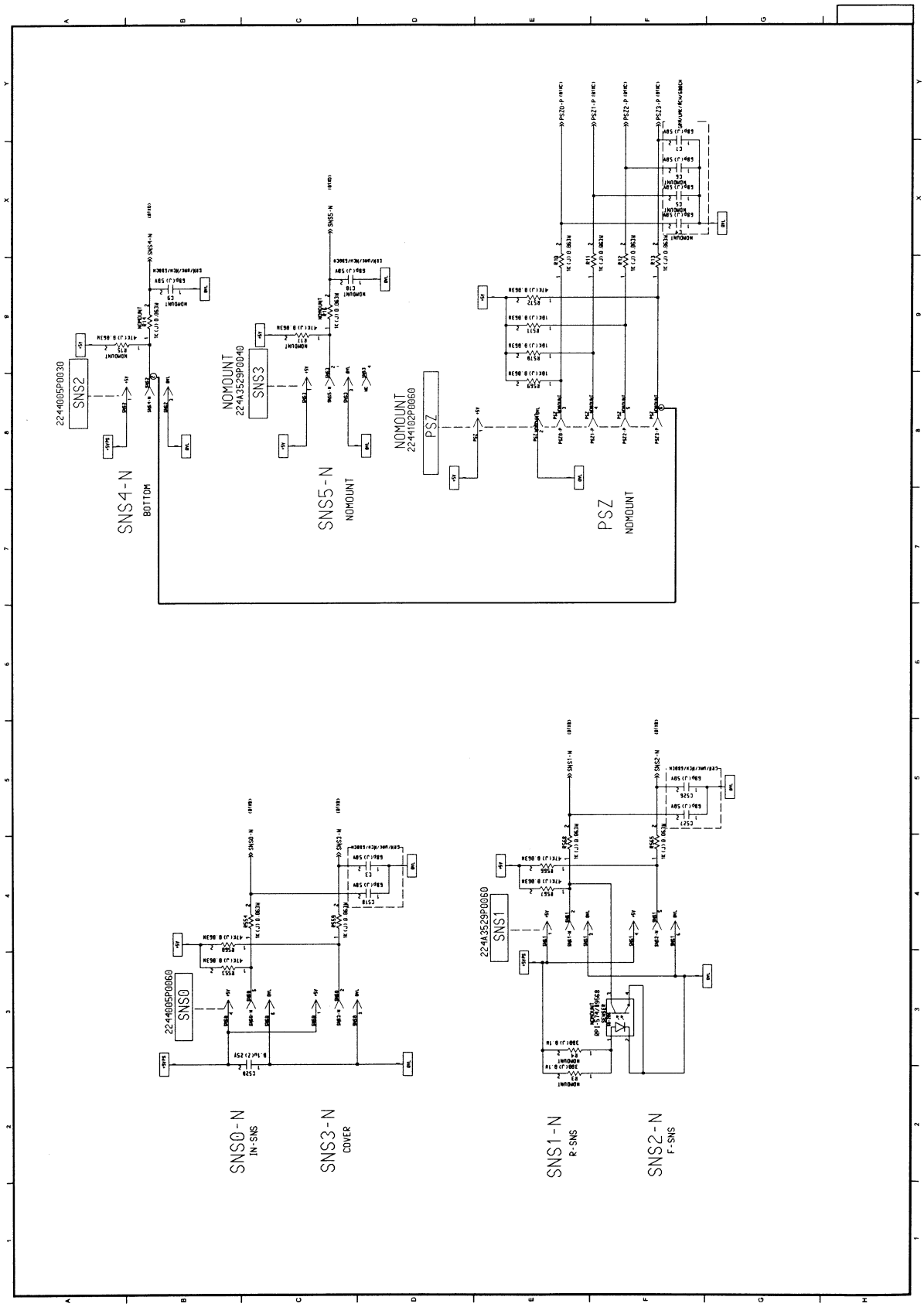


Figure 1-4 Duplex Control PWB (V7X Rev.1) (3/4)

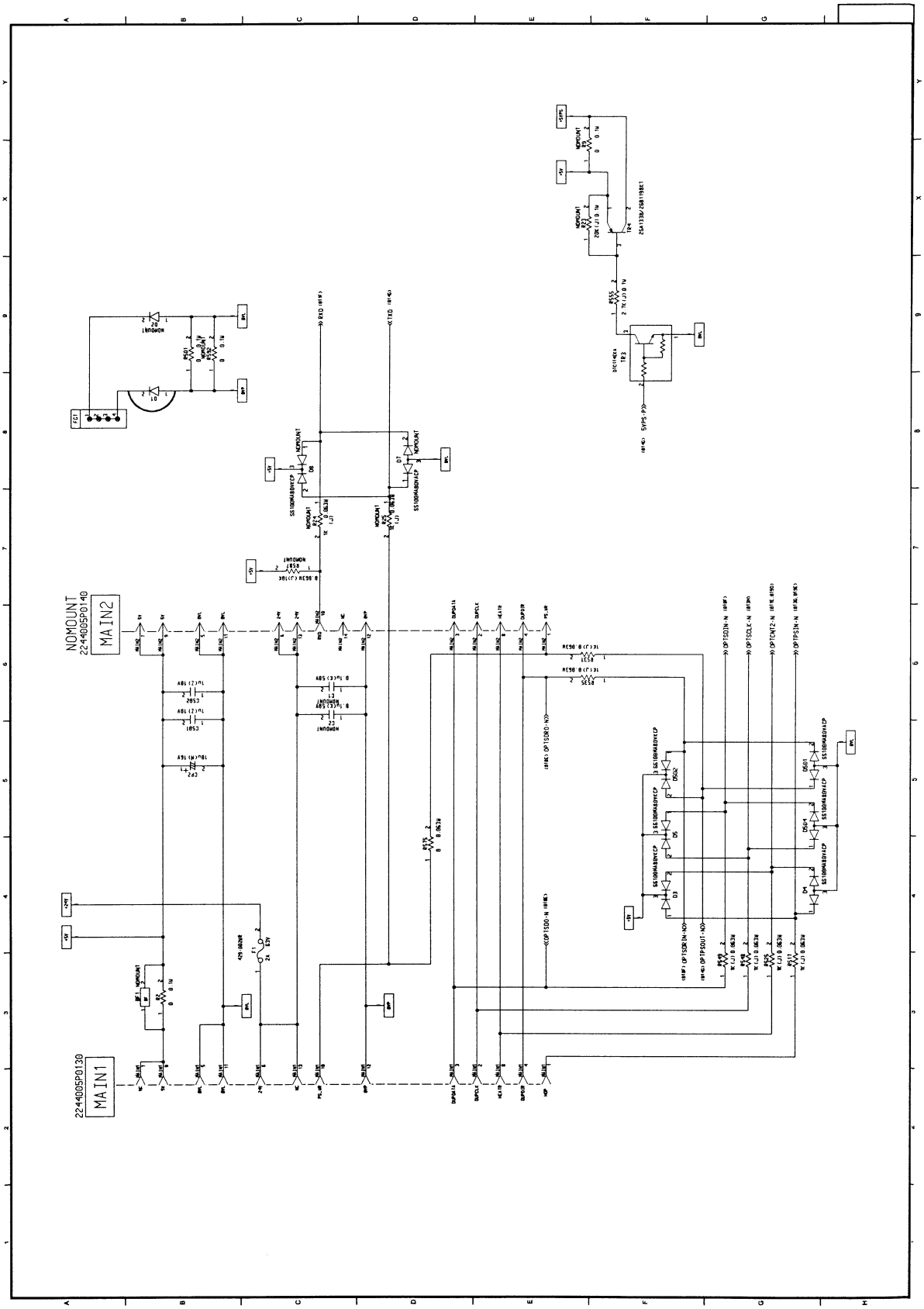


Figure 1-4 Duplex Control PWB (V7X Rev.1) (4/4)

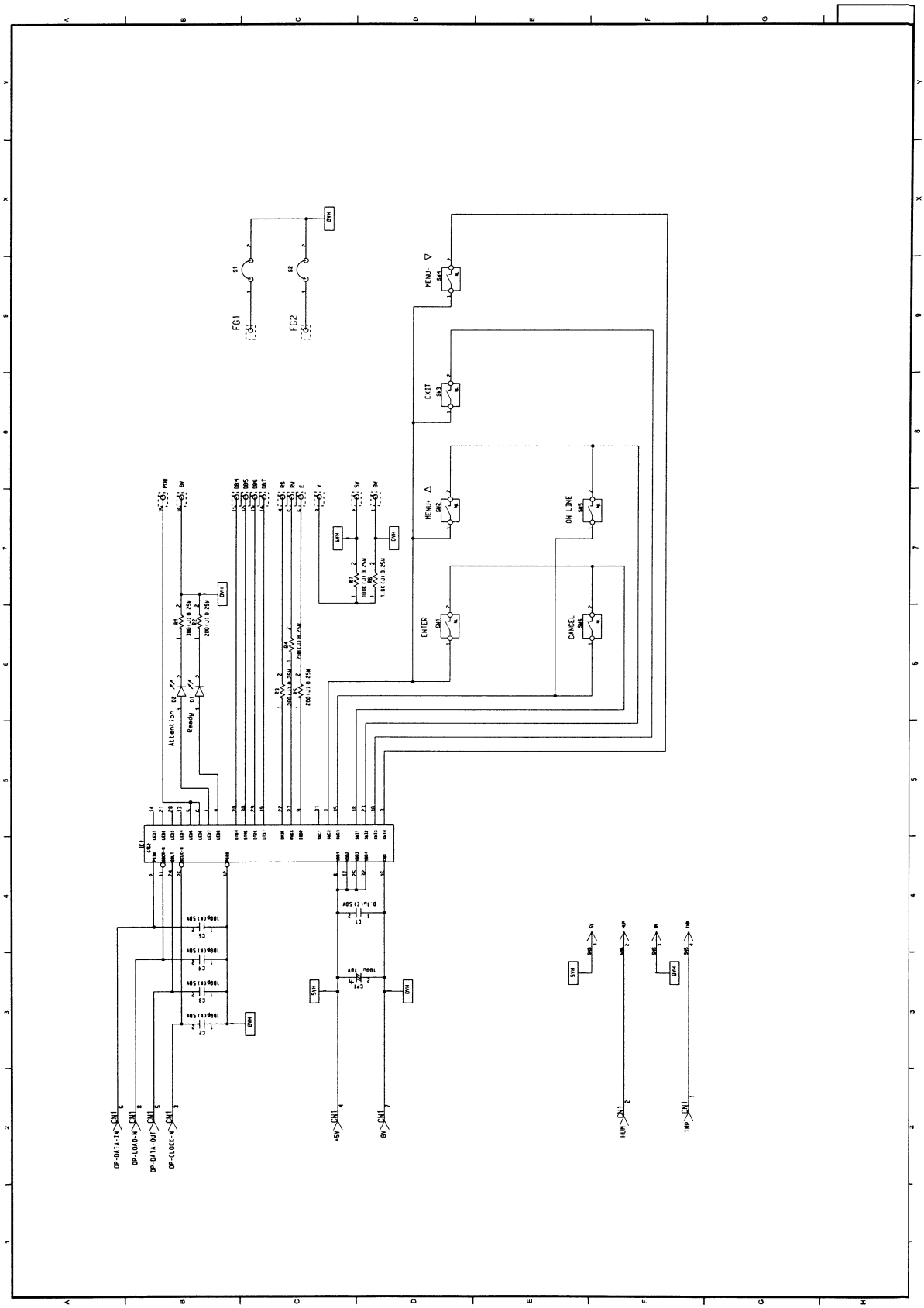


Figure 1-5 Control Panel PWB (RSP Rev.3) (1/1)

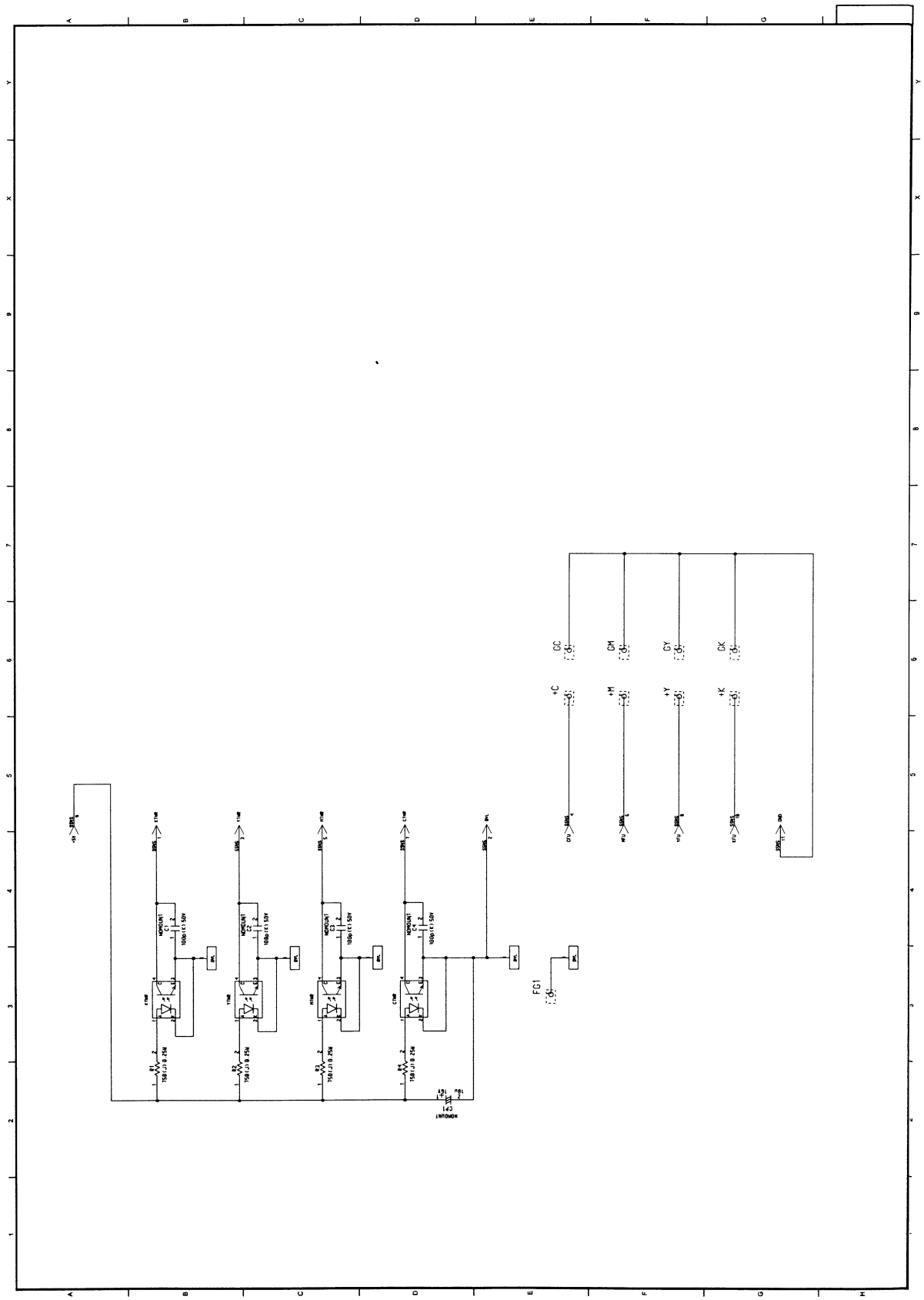


Figure 1-6 Toner Low Sensor PWB (PRD Rev.3) (1/1)

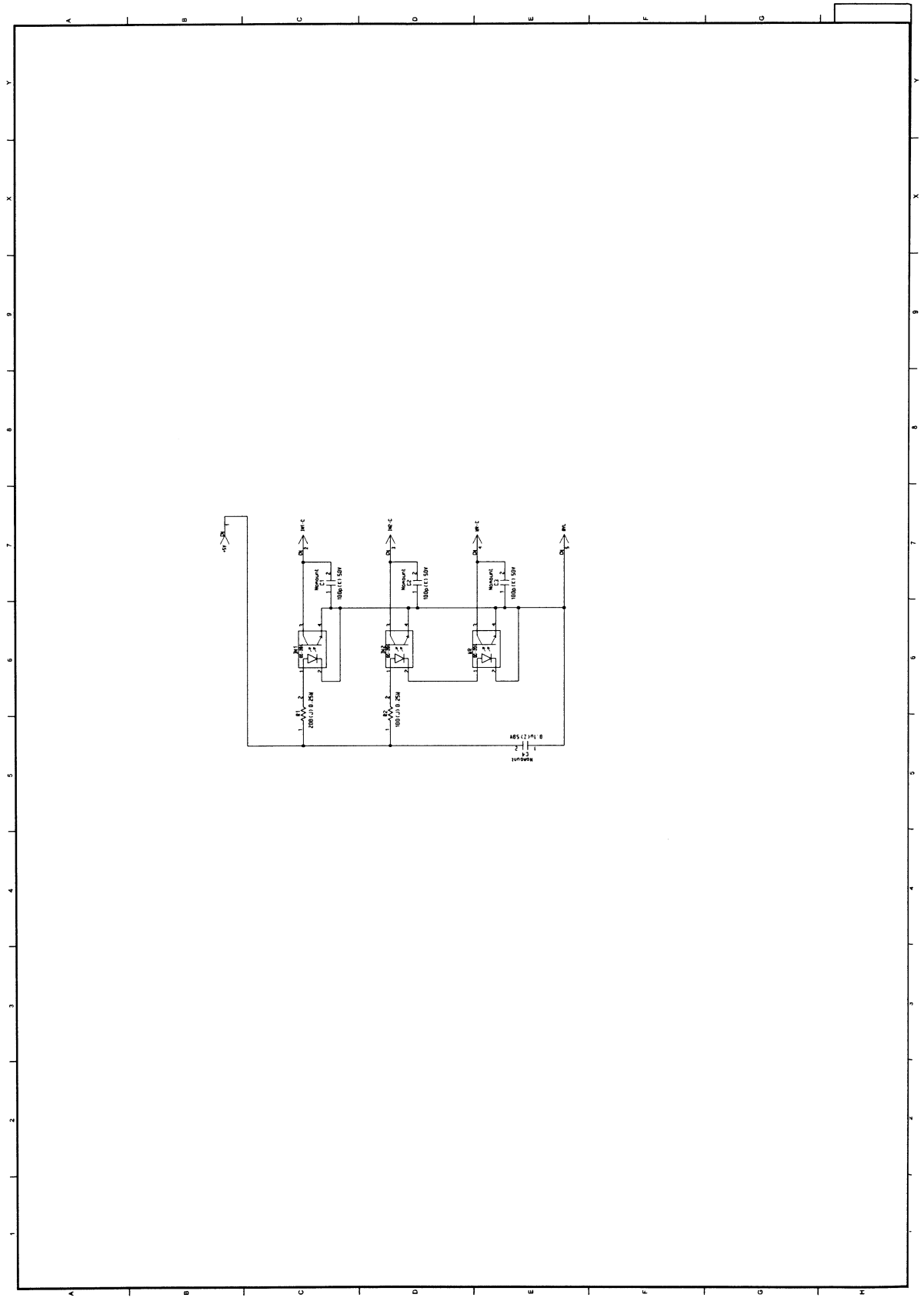


Figure 1-7 Entrance Sensor PWB (RSF Rev.3) (1/1)

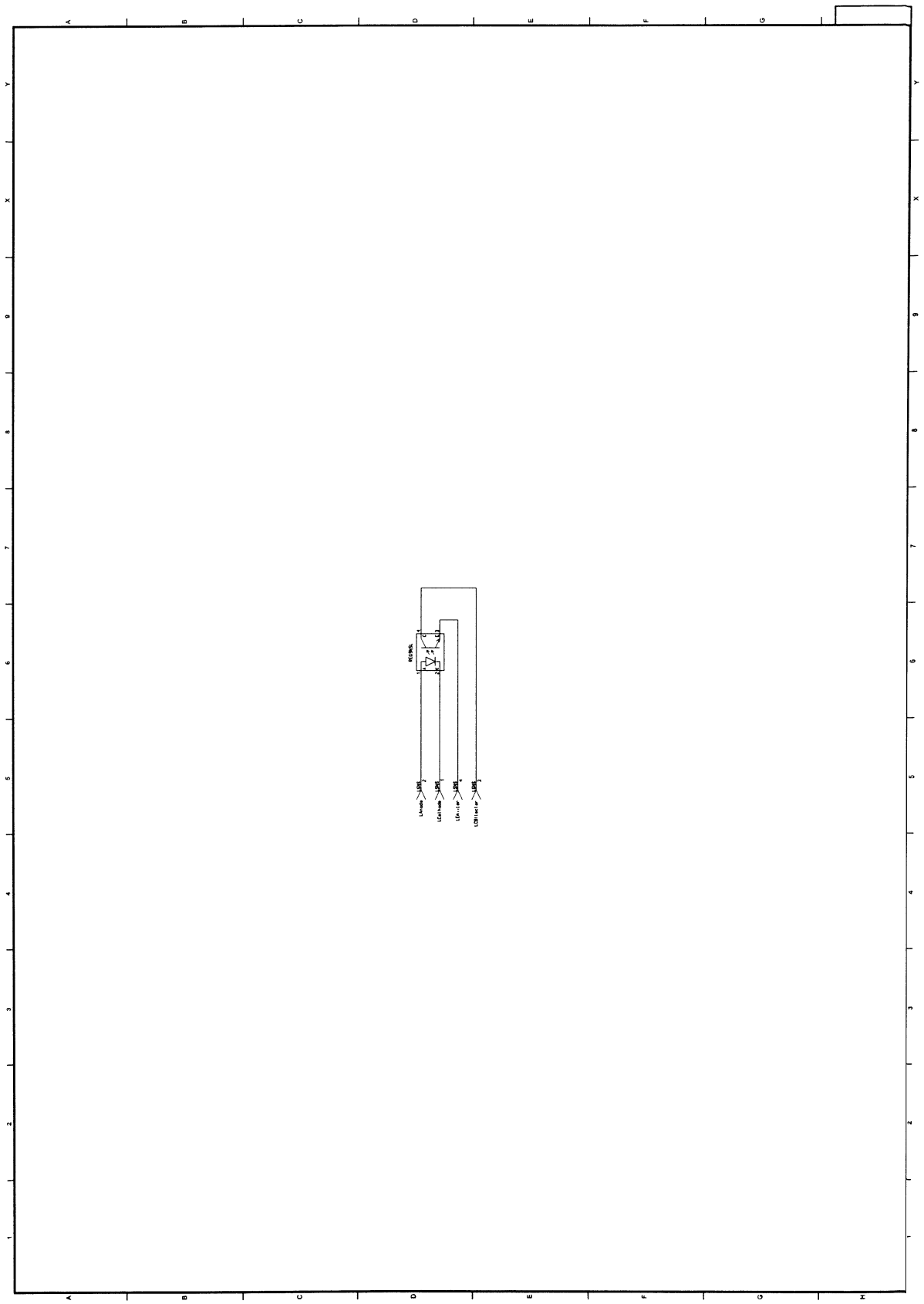


Figure 1-8 Color Registration Sensor PWB (Z71 Rev.1) (1/2)

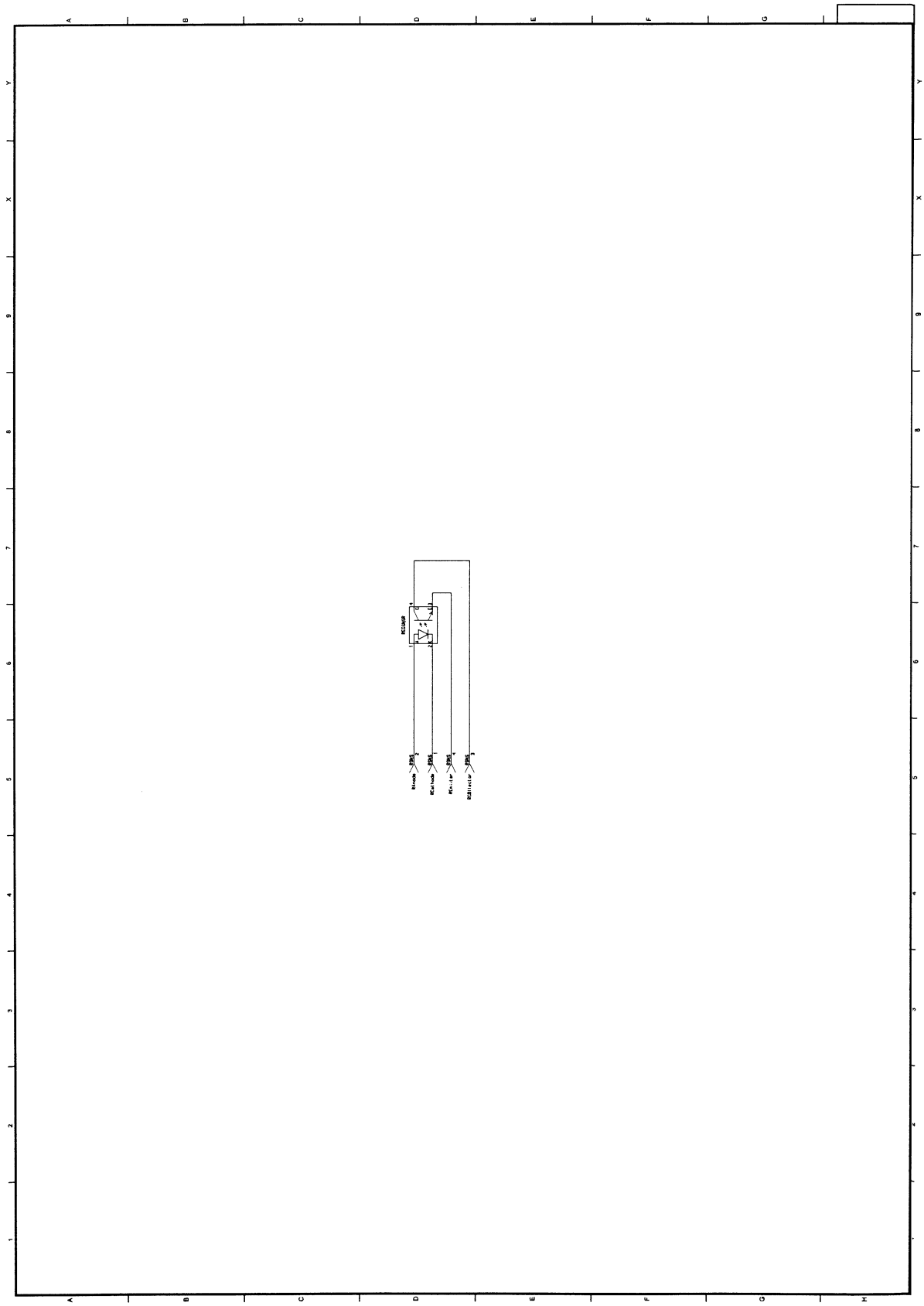


Figure 1-8 Color Registration Sensor PWB (Z71 Rev.1) (2/2)

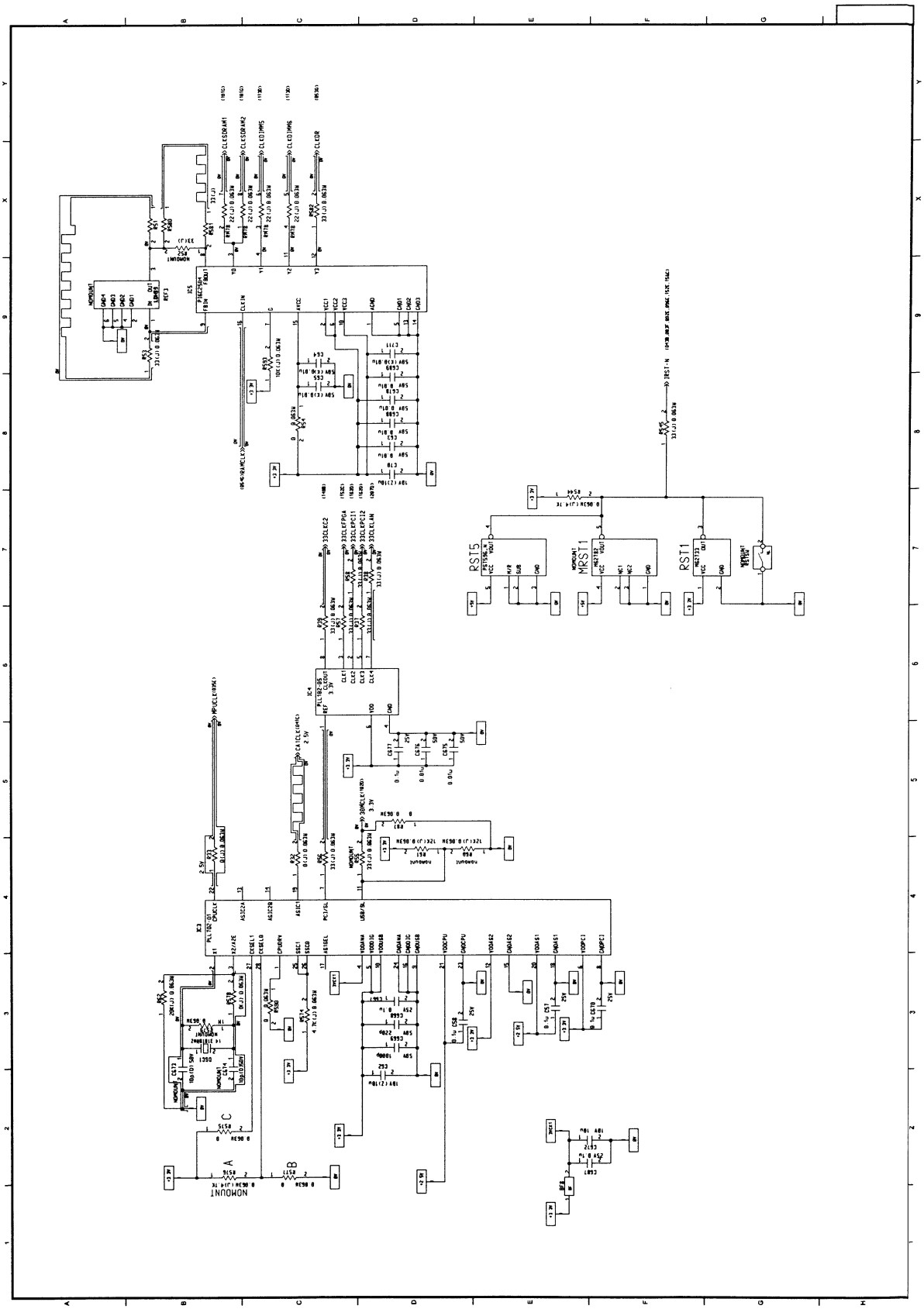
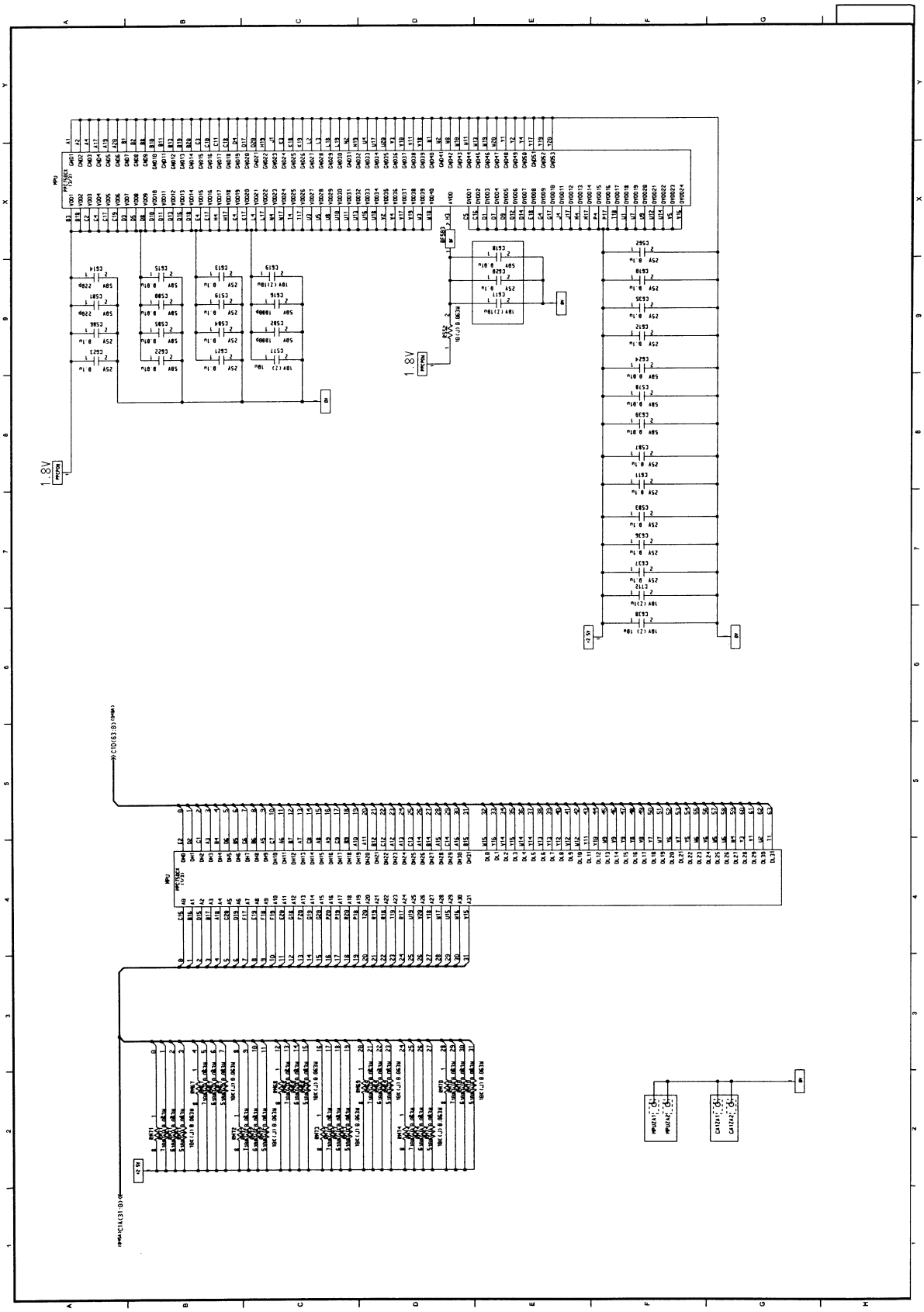


Figure 1-9 Main Controller PWB (OWL Rev.1) (1/25)



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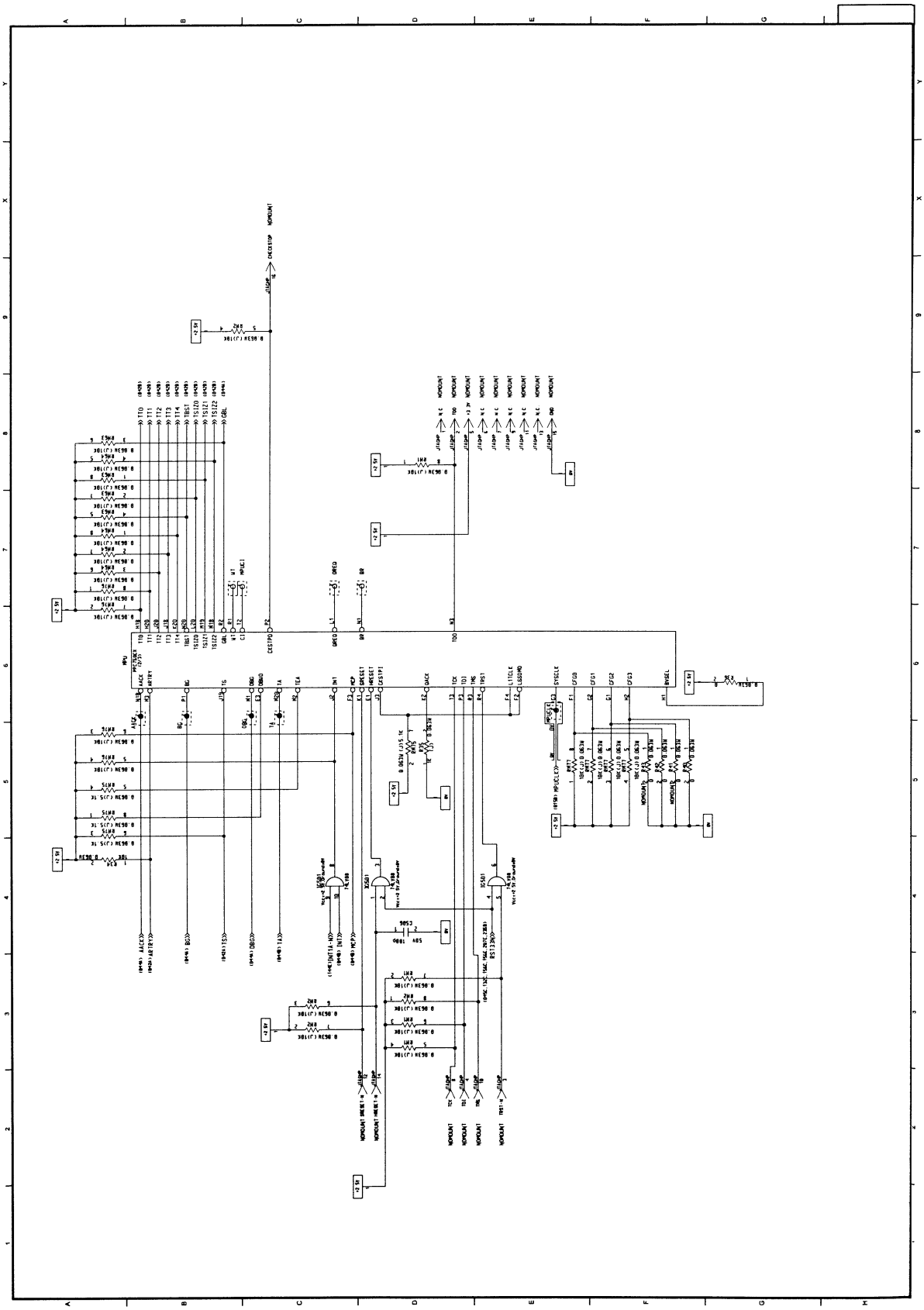

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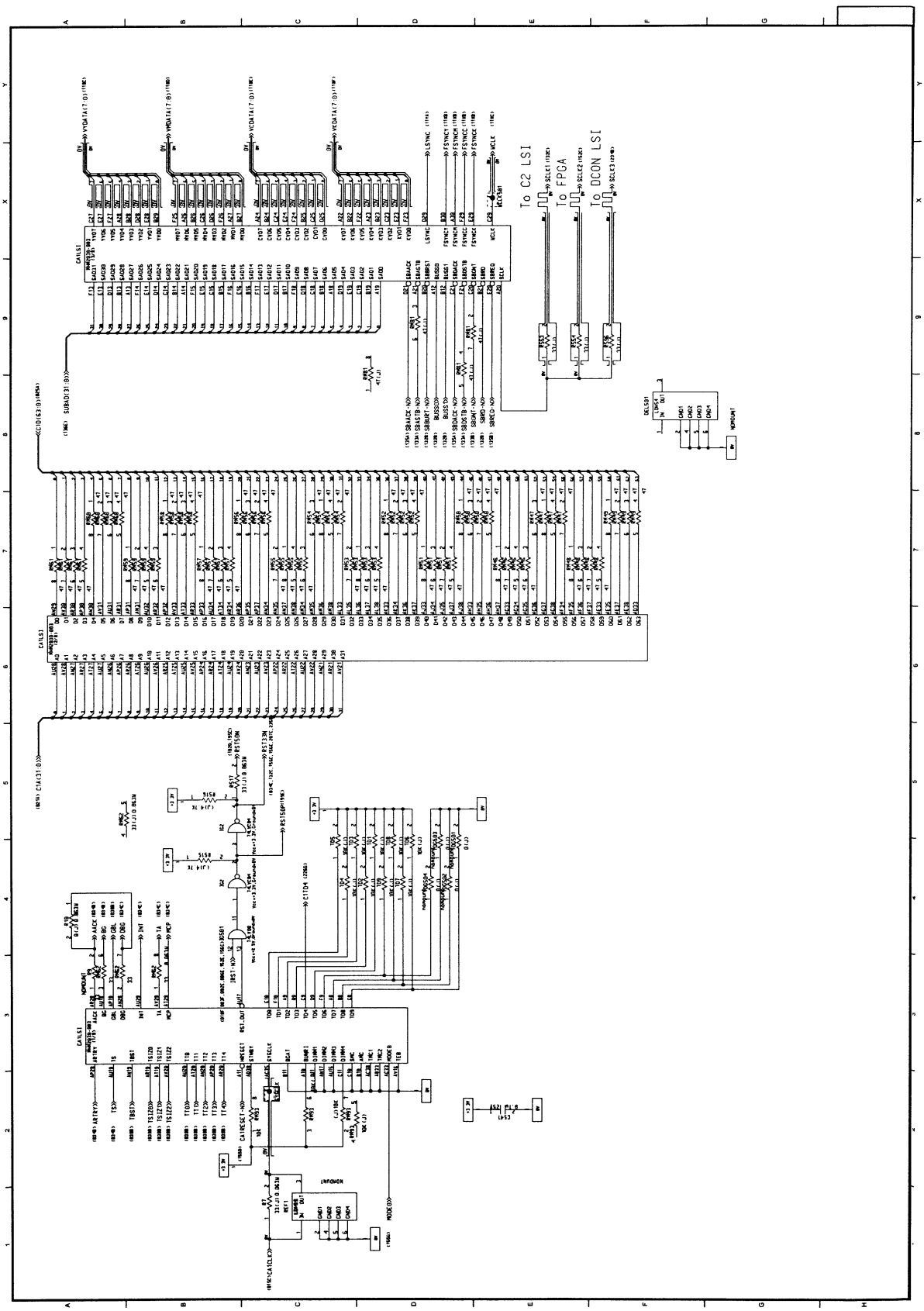


Figure 1-9 Main Controller PWB (OWL Rev.1) (4/25)

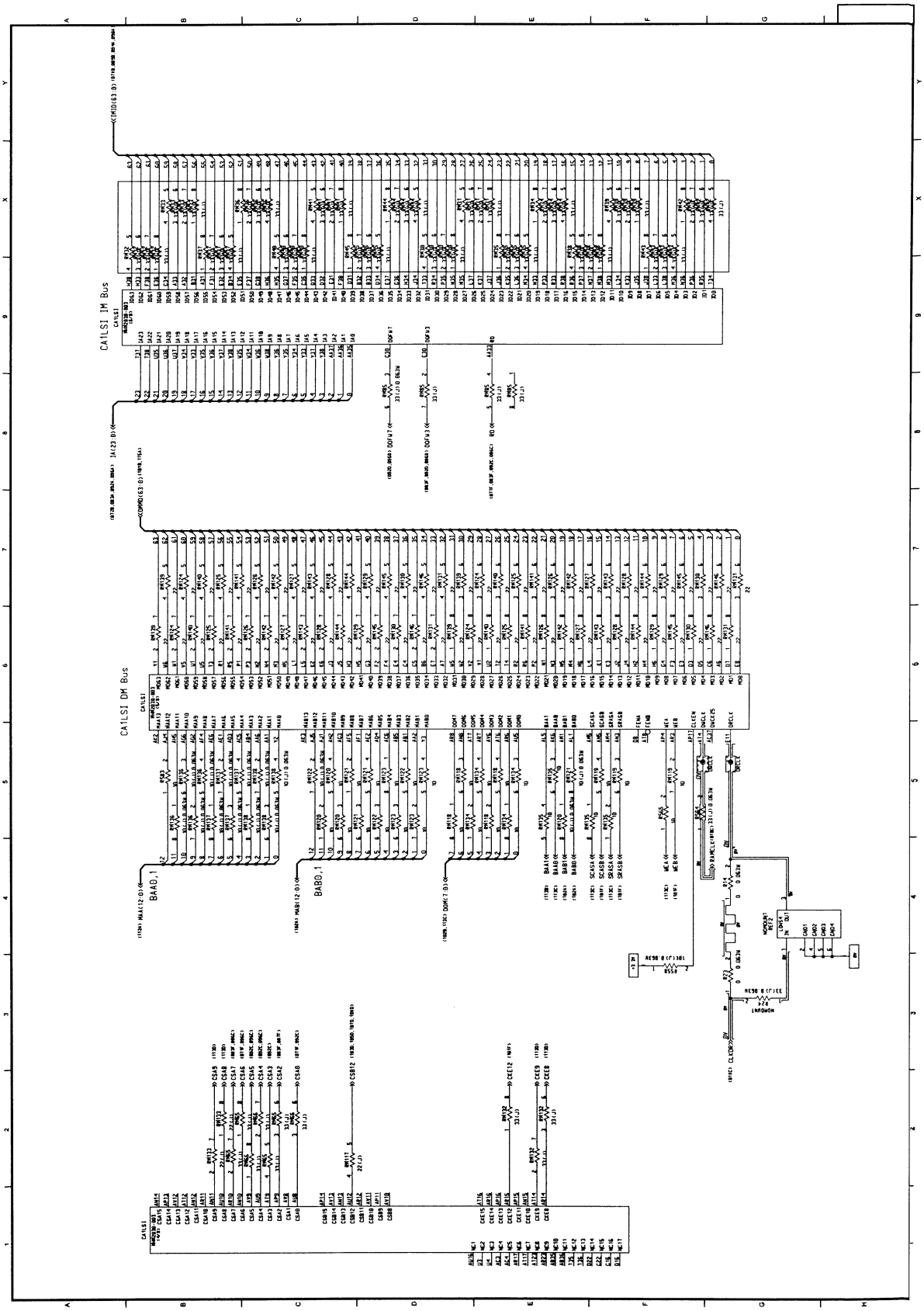
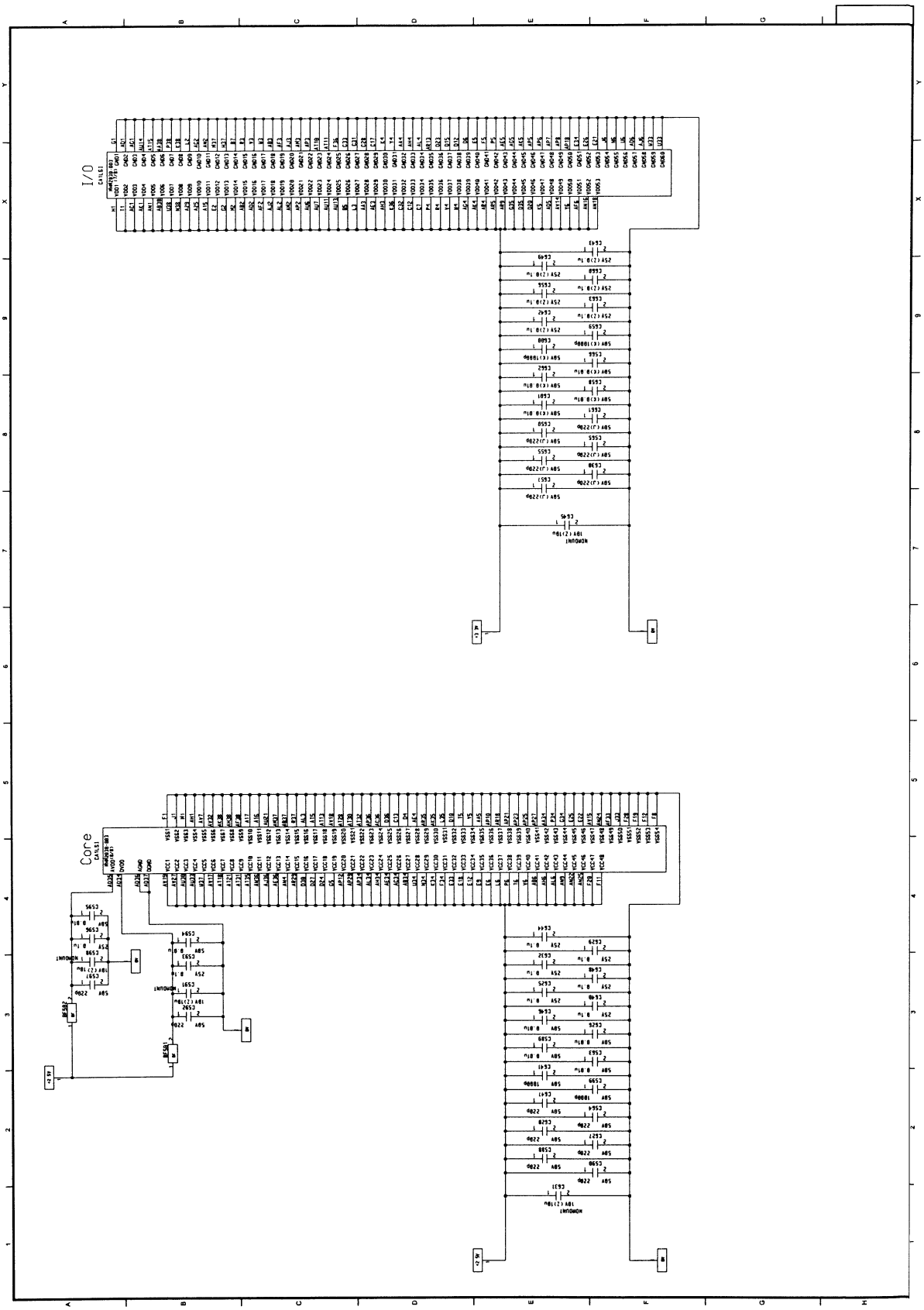


Figure 1-9 Main Controller PWB (OWL Rev.1) (5/25)



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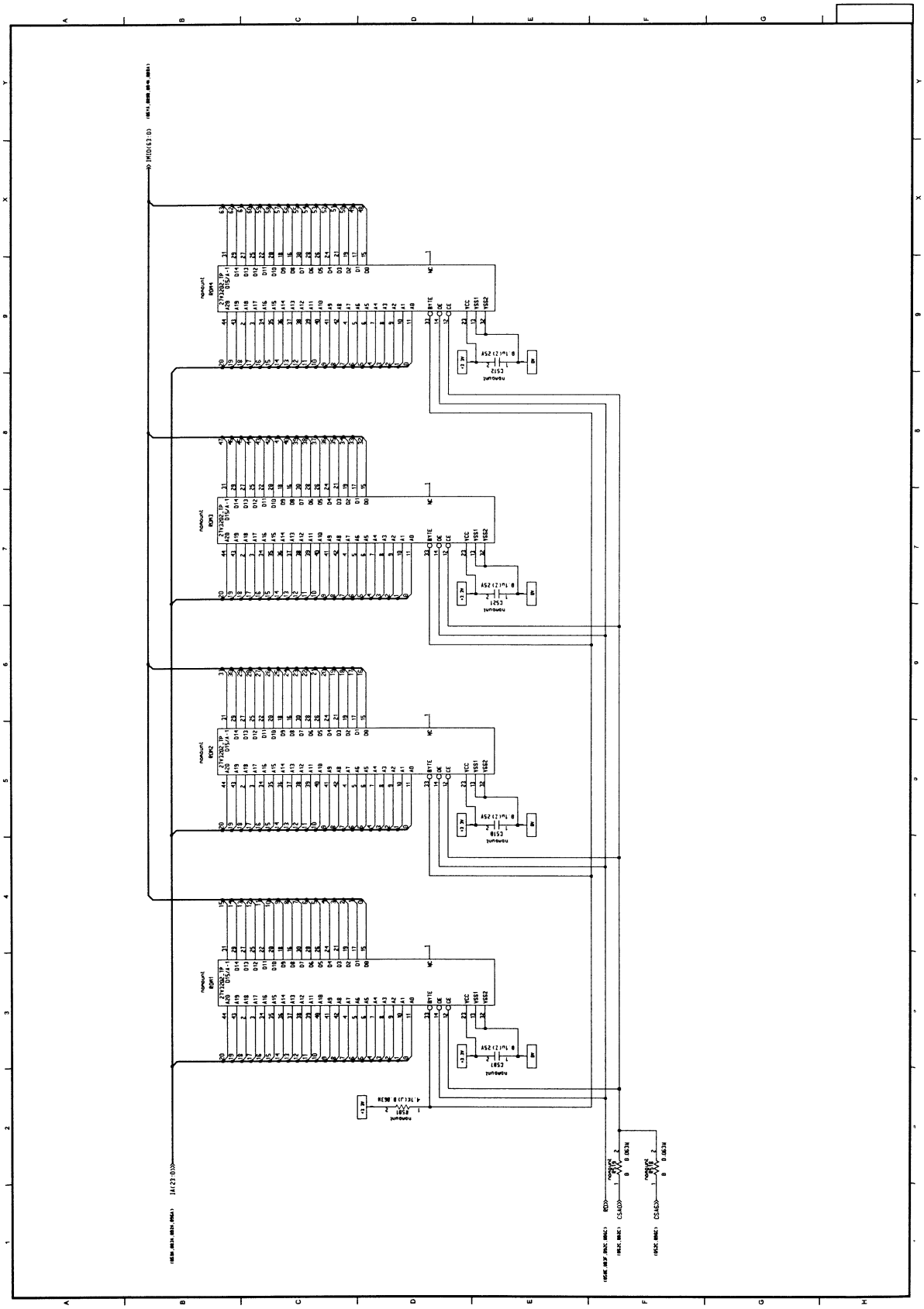


Figure 1-9 Main Controller PWB (OWL Rev.1) (7/25)

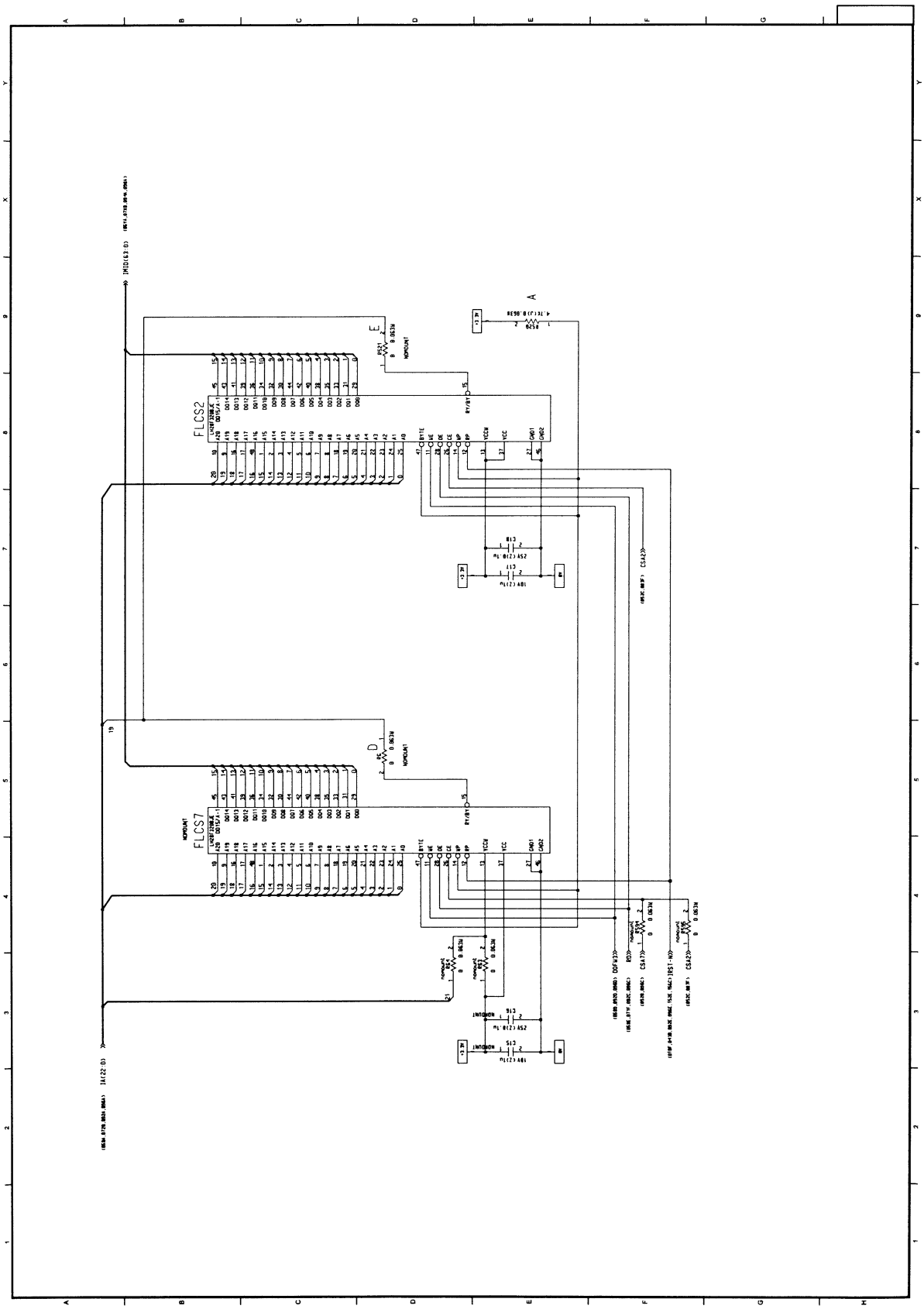
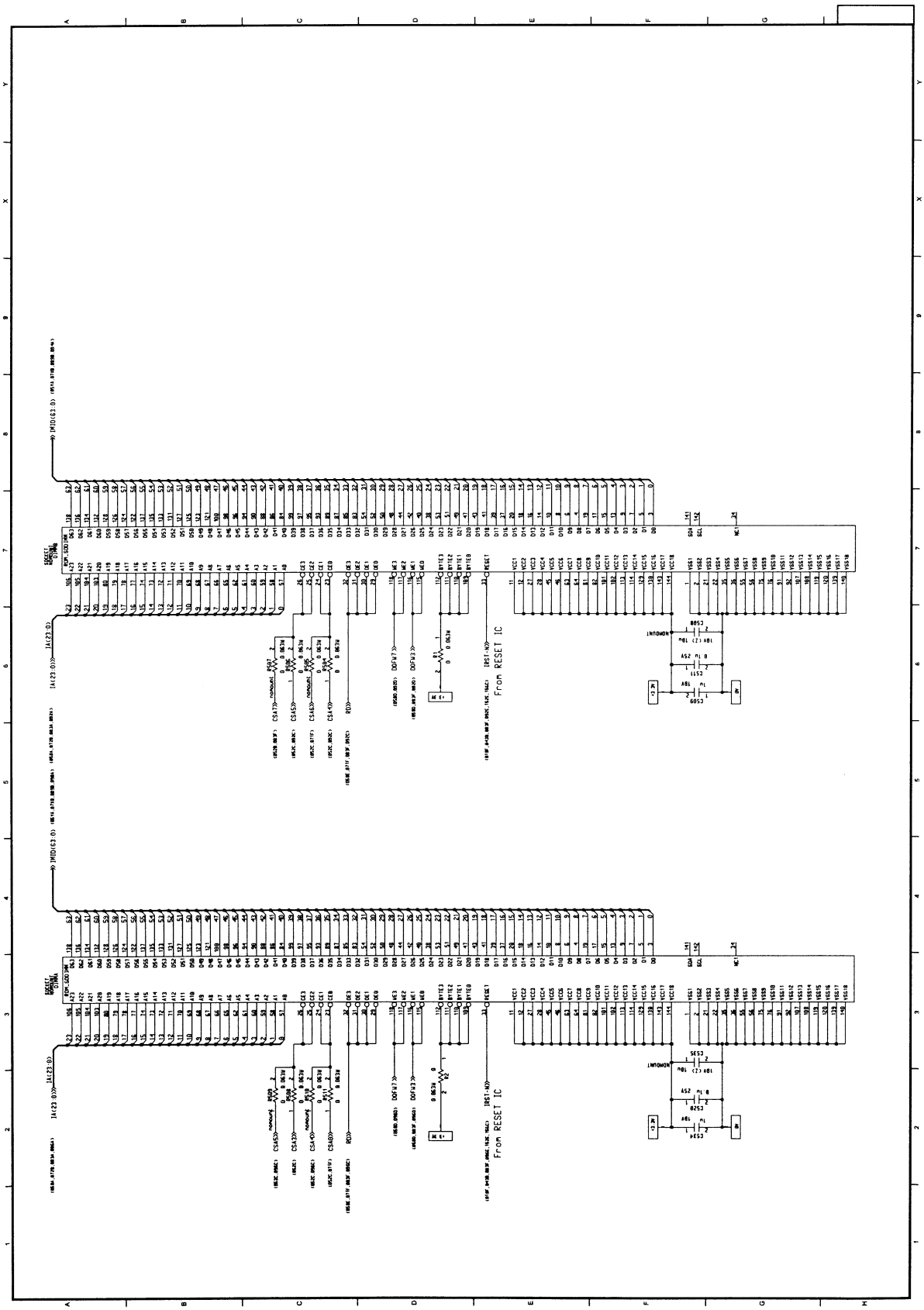


Figure 1-9 Main Controller PWB (OWL Rev.1) (8/25)



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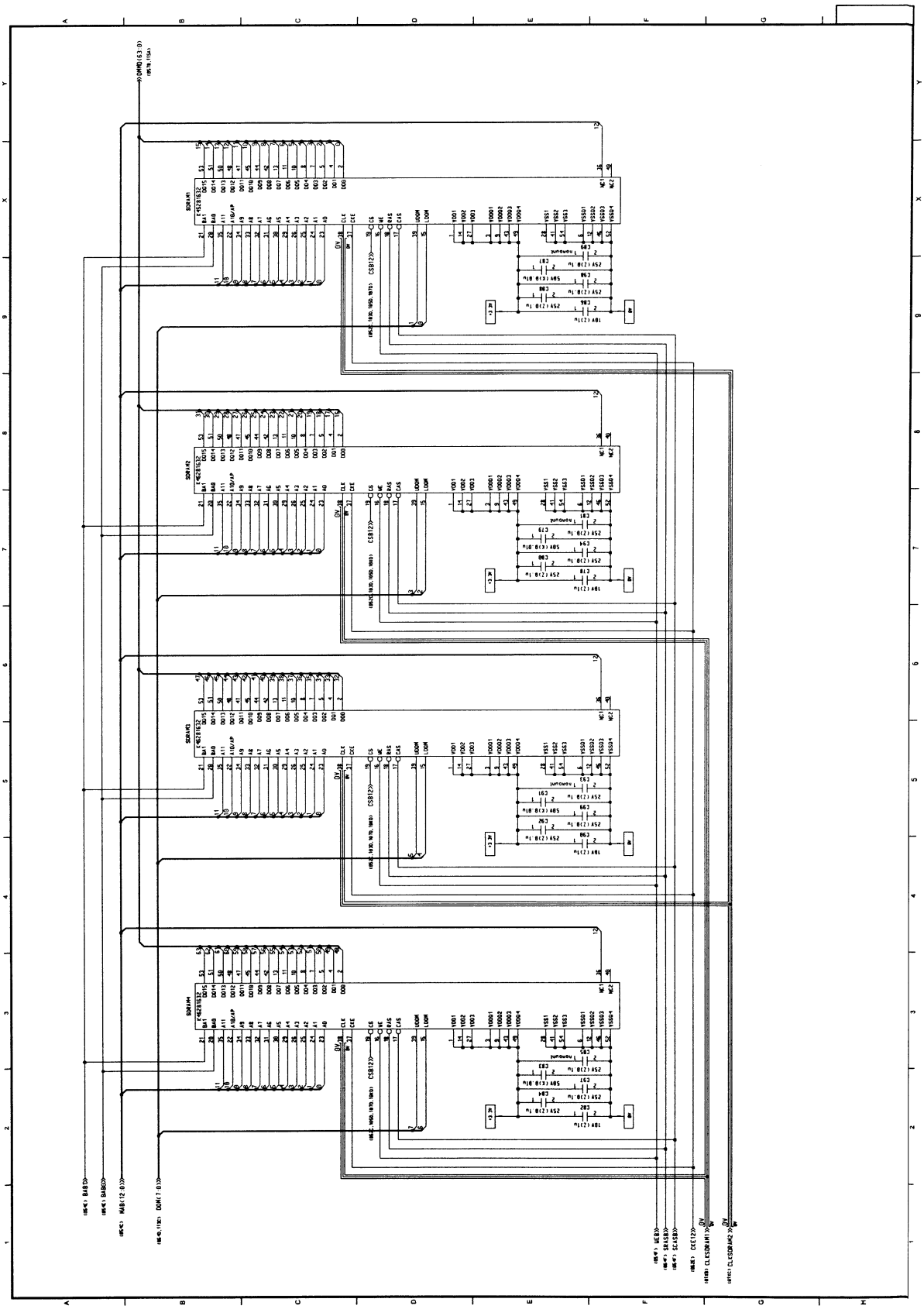

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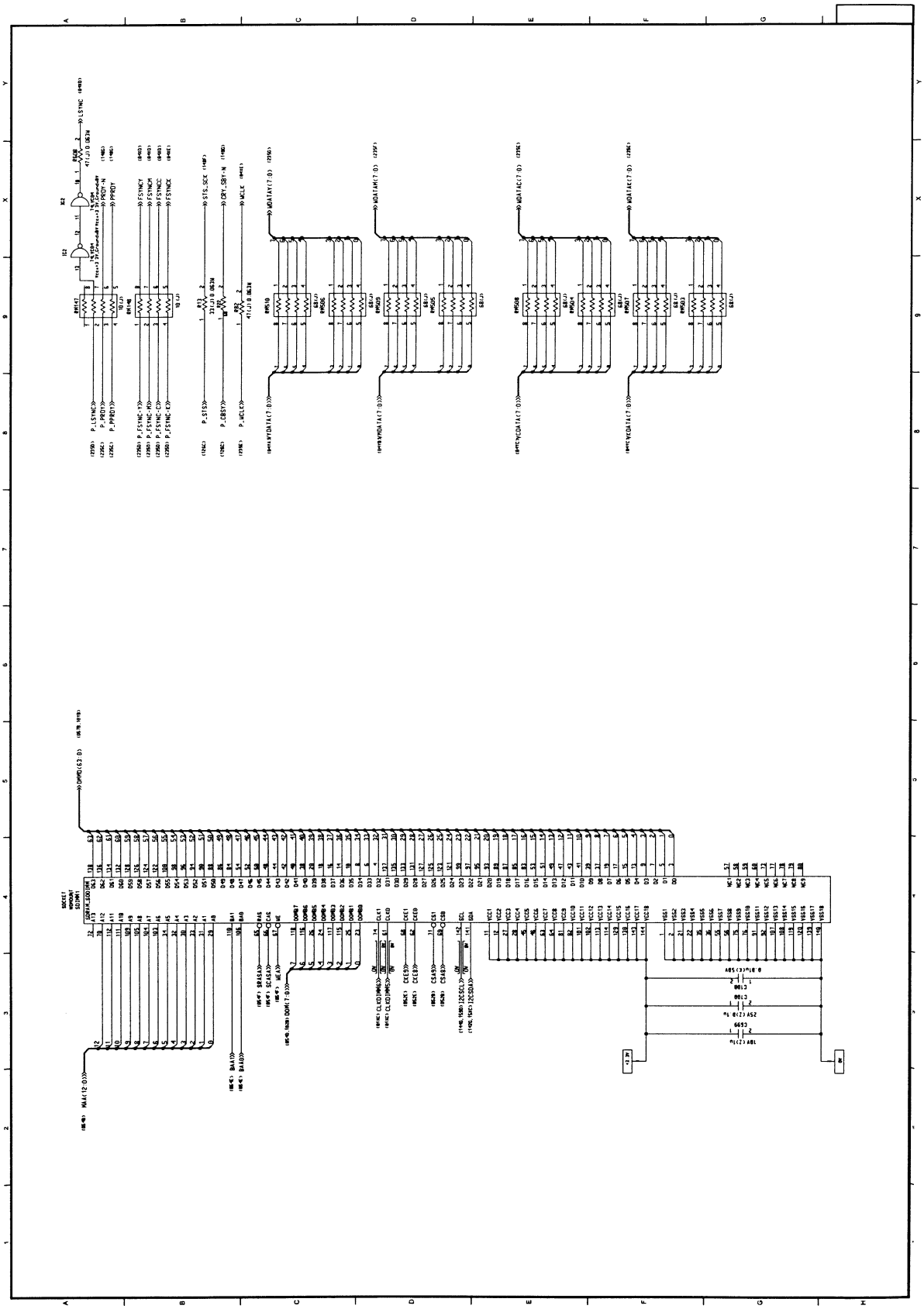


Figure 1-9 Main Controller PWB (OWL Rev.1) (11/25)

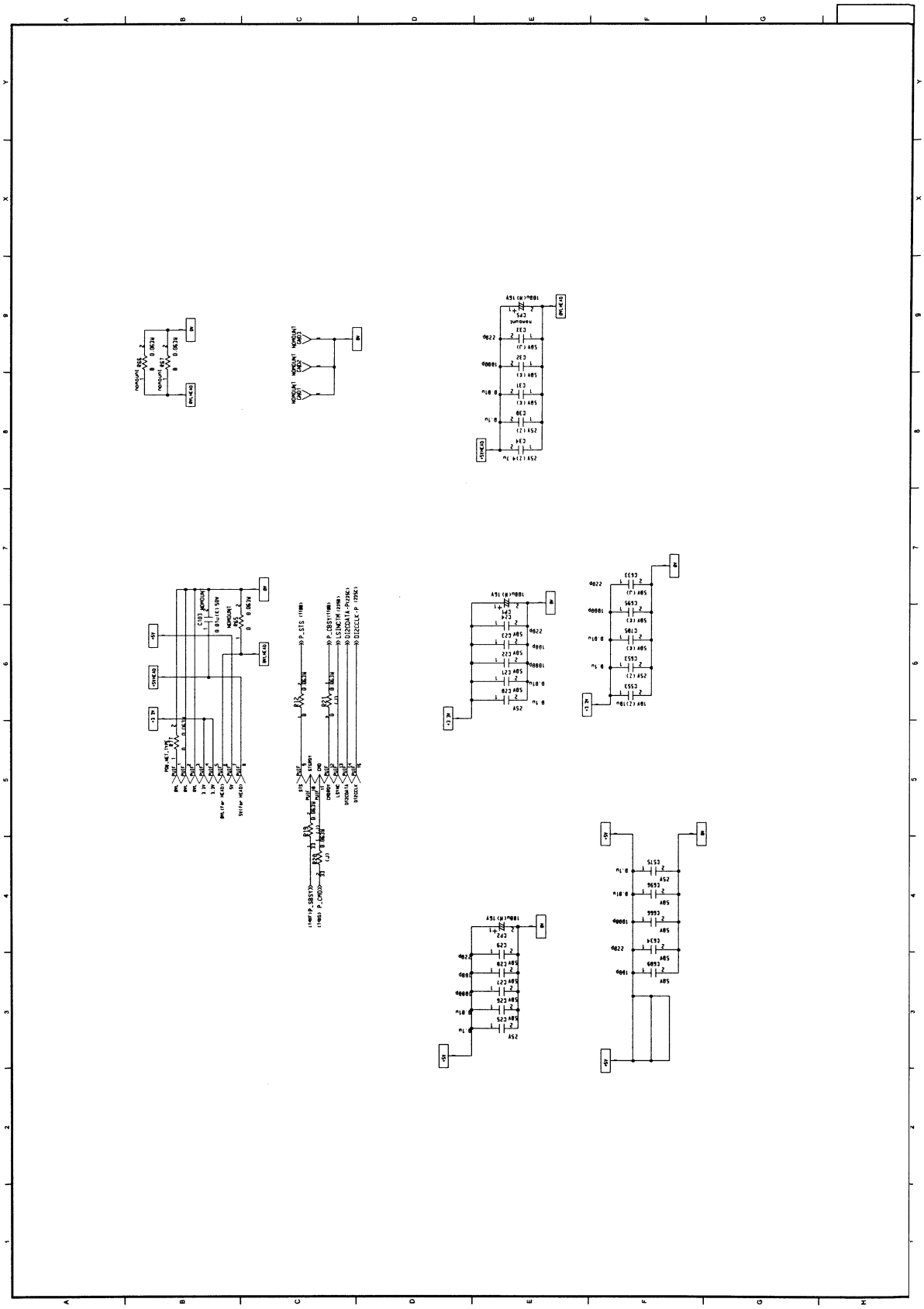


Figure 1-9 Main Controller PWB (OWL Rev.1) (12/25)

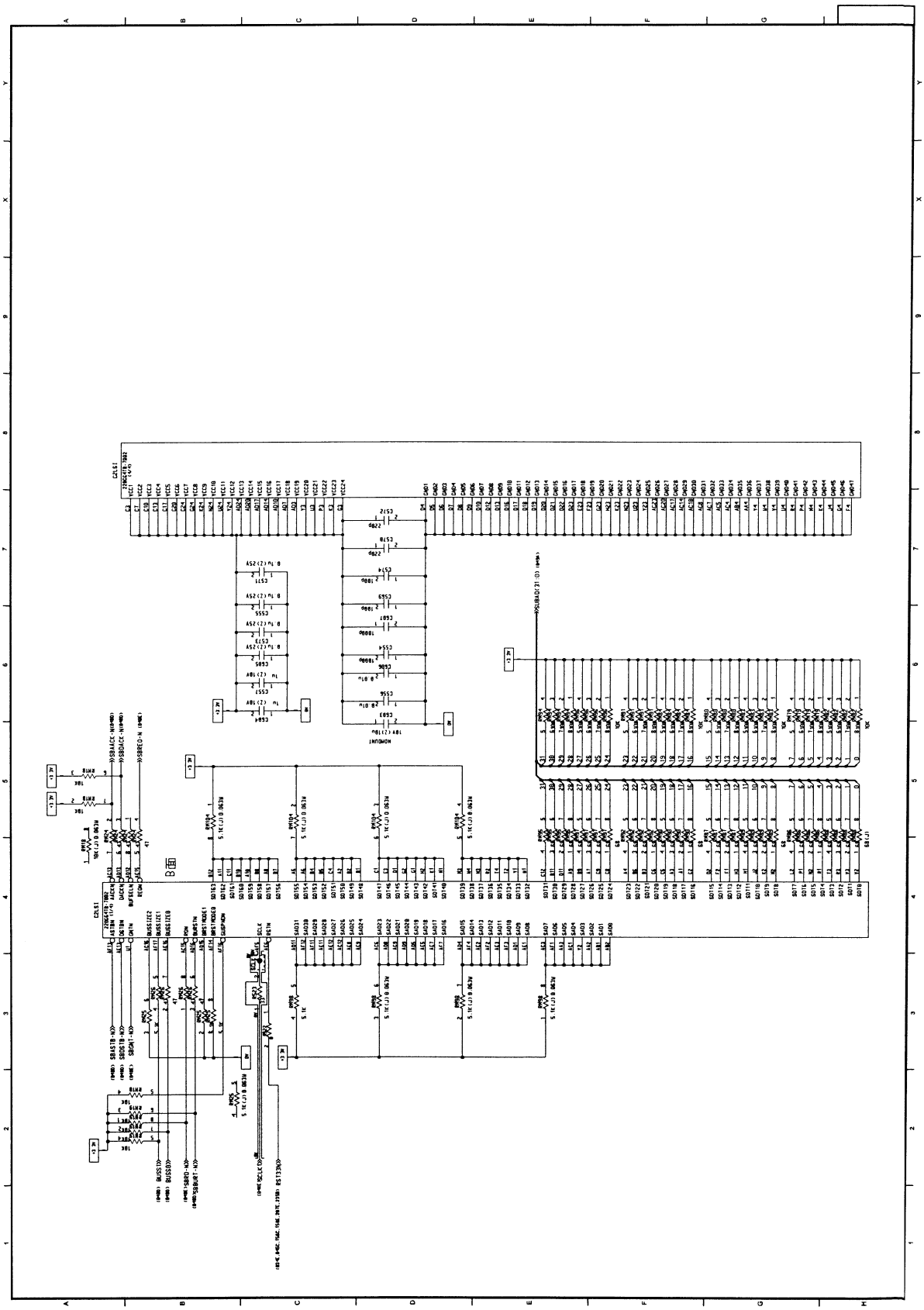


Figure 1-9 Main Controller PWB (OWL Rev.1) (13/25)

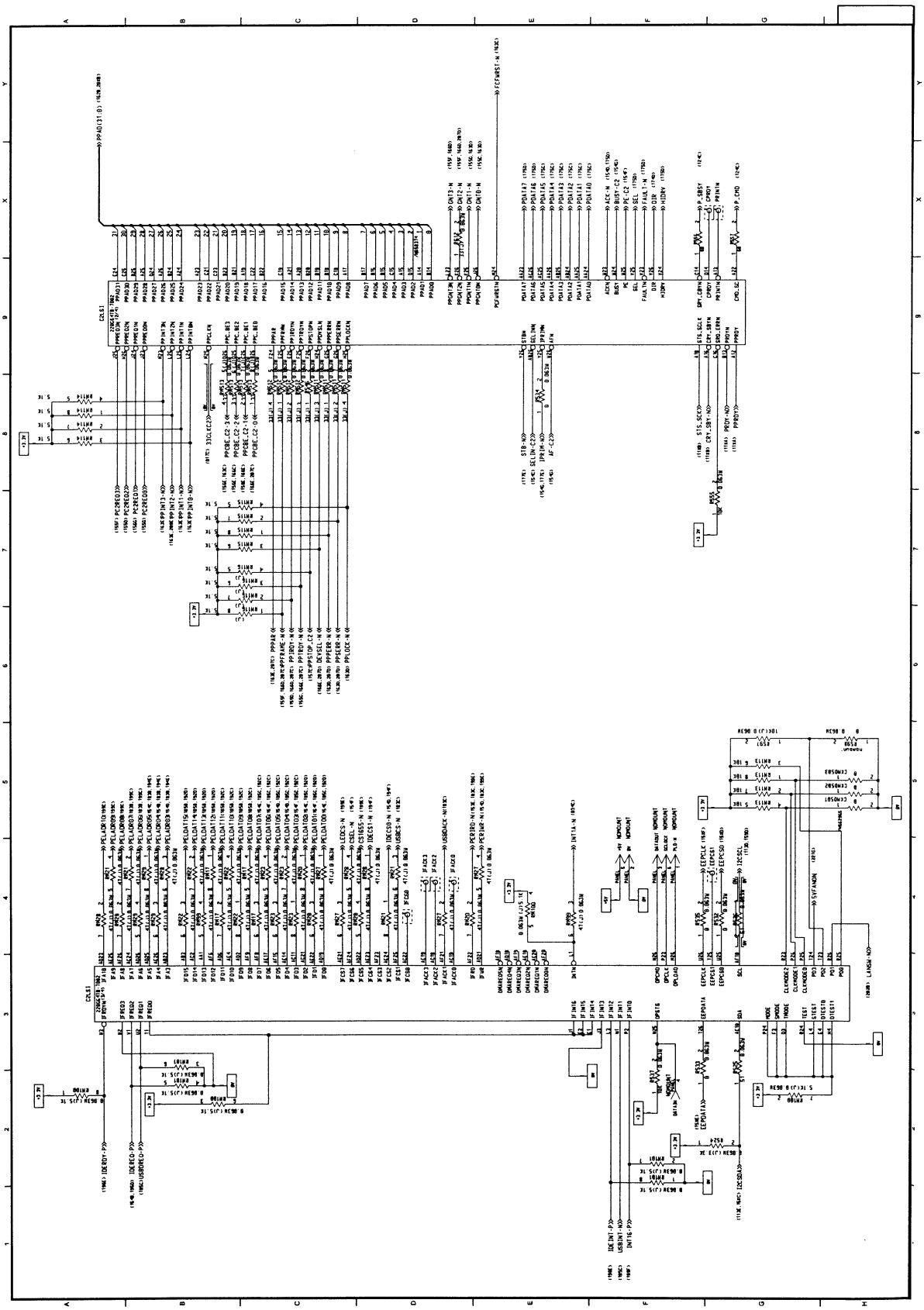


Figure 1-9 Main Controller PWB (OWL Rev.1) (14/25)

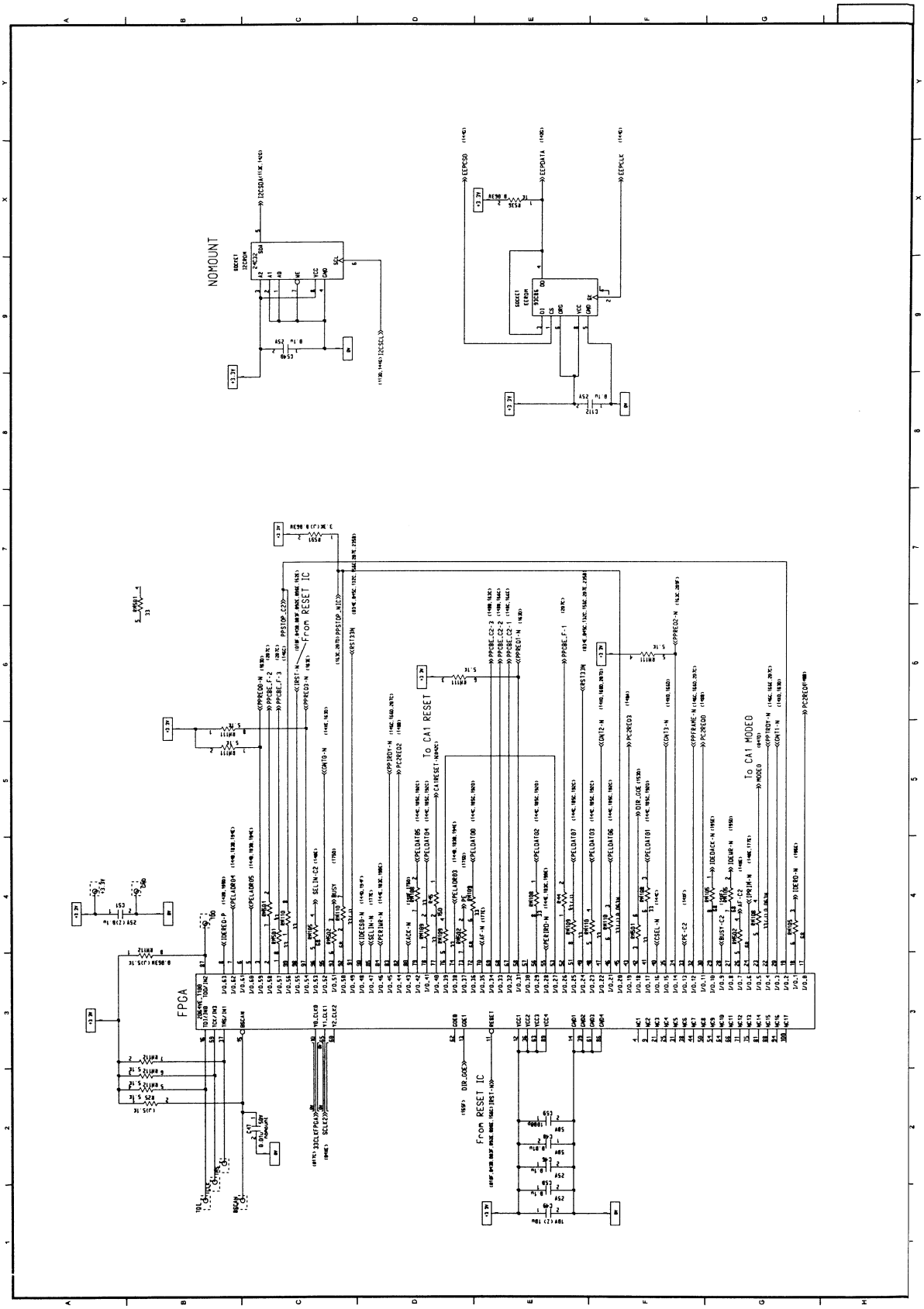


Figure 1-9 Main Controller PWB (OWL Rev.1) (15/25)

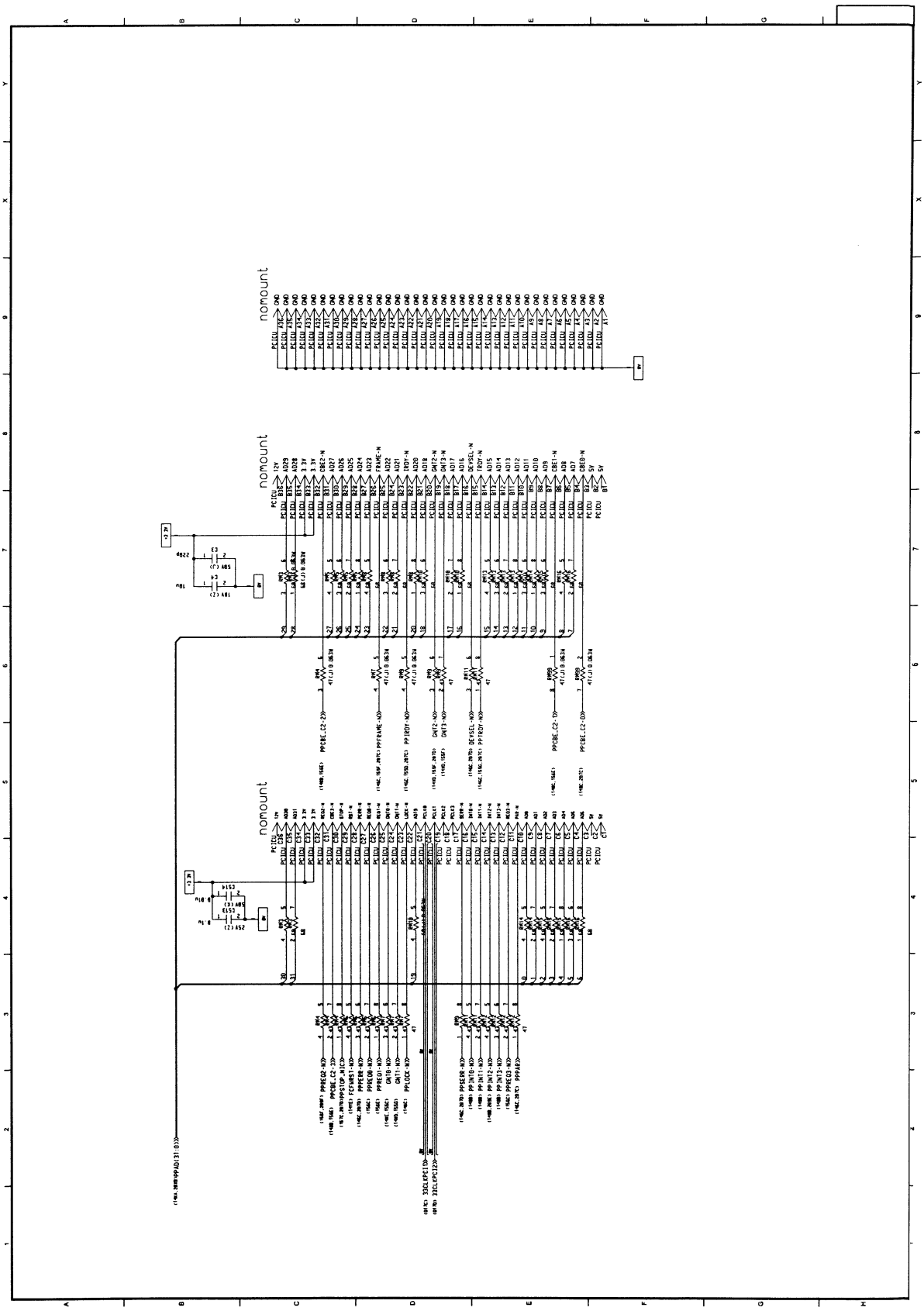


Figure 1-9 Main Controller PWB (OWL Rev.1) (16/25)

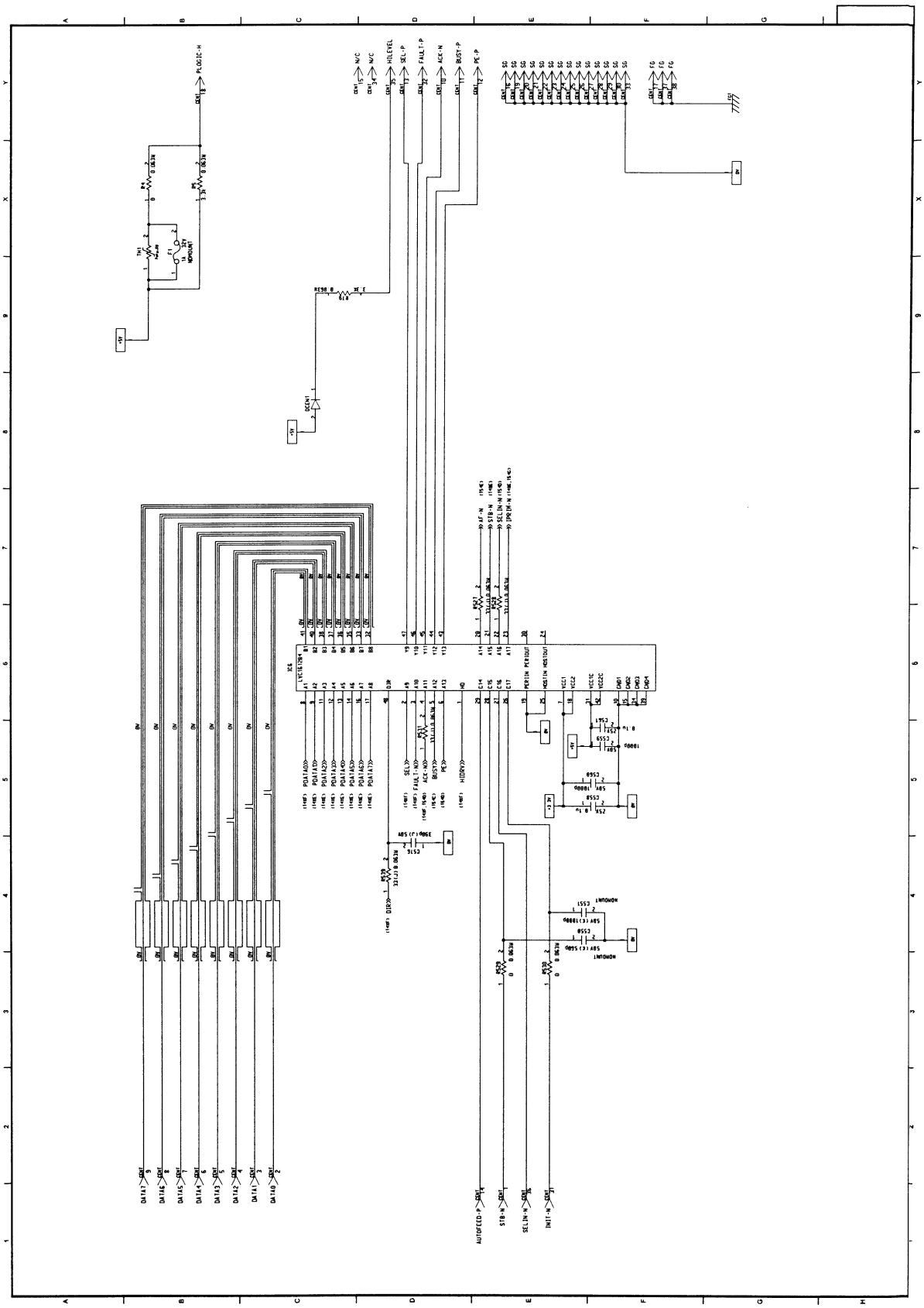


Figure 1-9 Main Controller PWB (OWL Rev.1) (17/25)

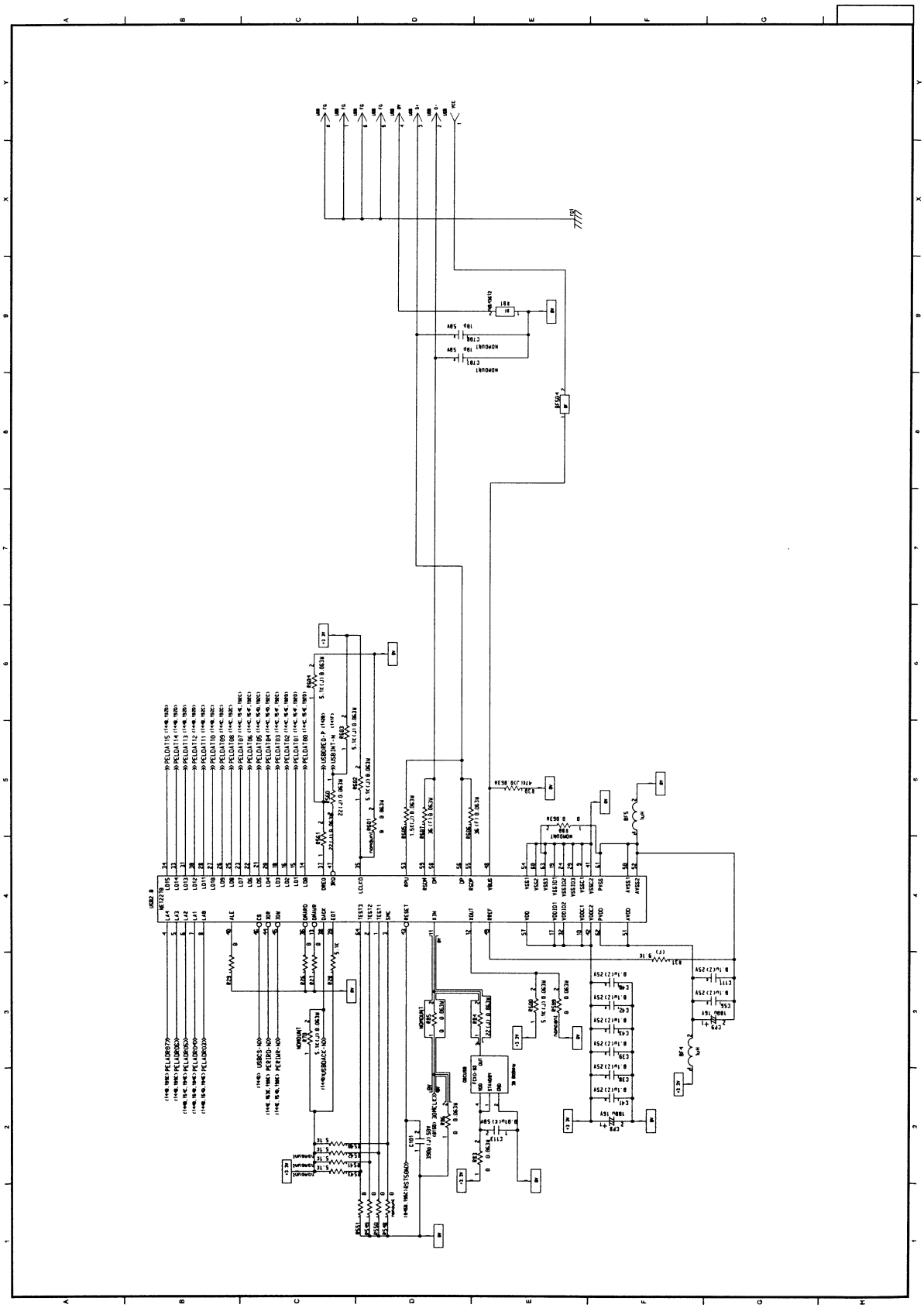


Figure 1-9 Main Controller PWB (OWL Rev.1) (18/25)

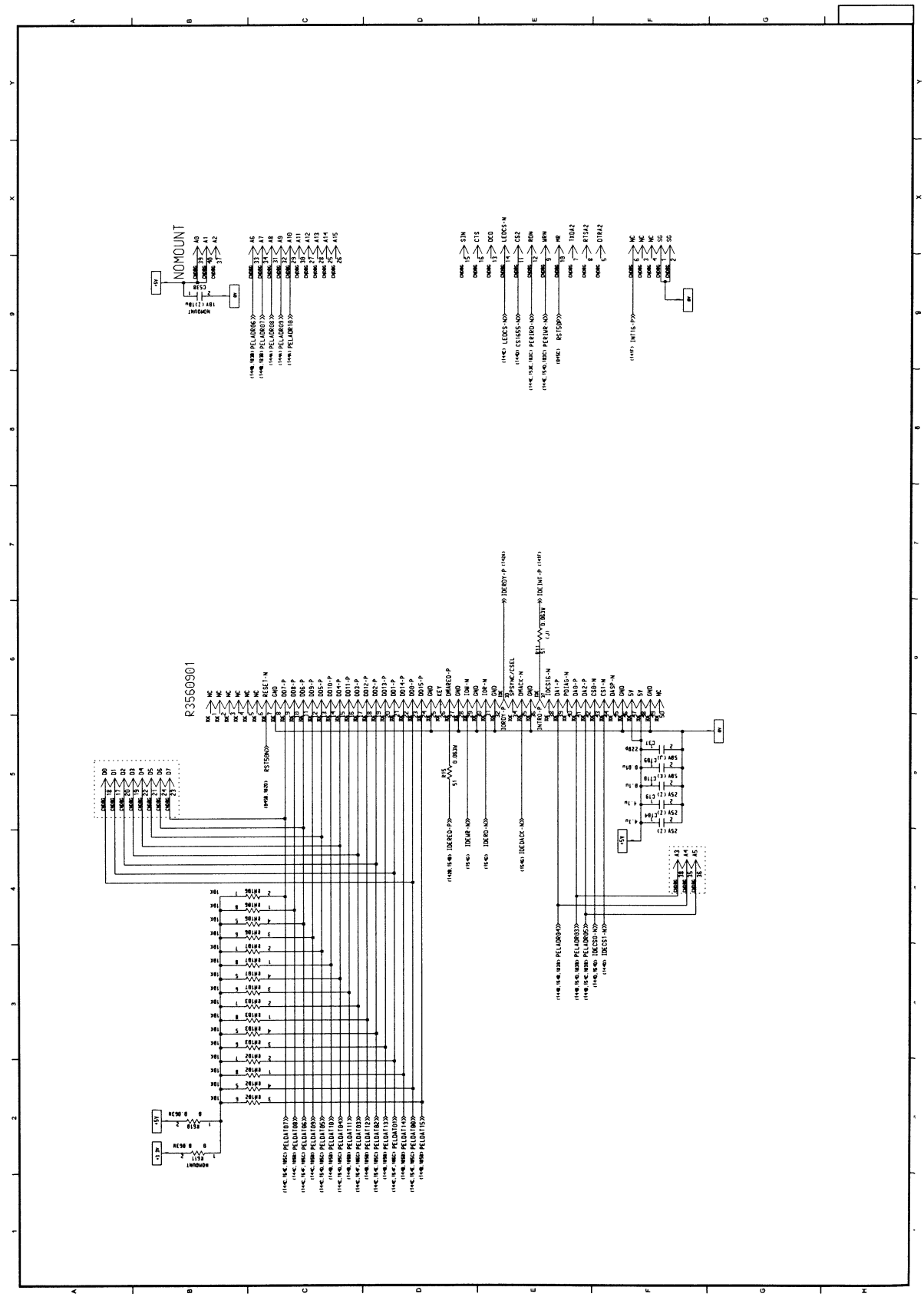


Figure 1-9 Main Controller PWB (OWL Rev.1) (19/25)

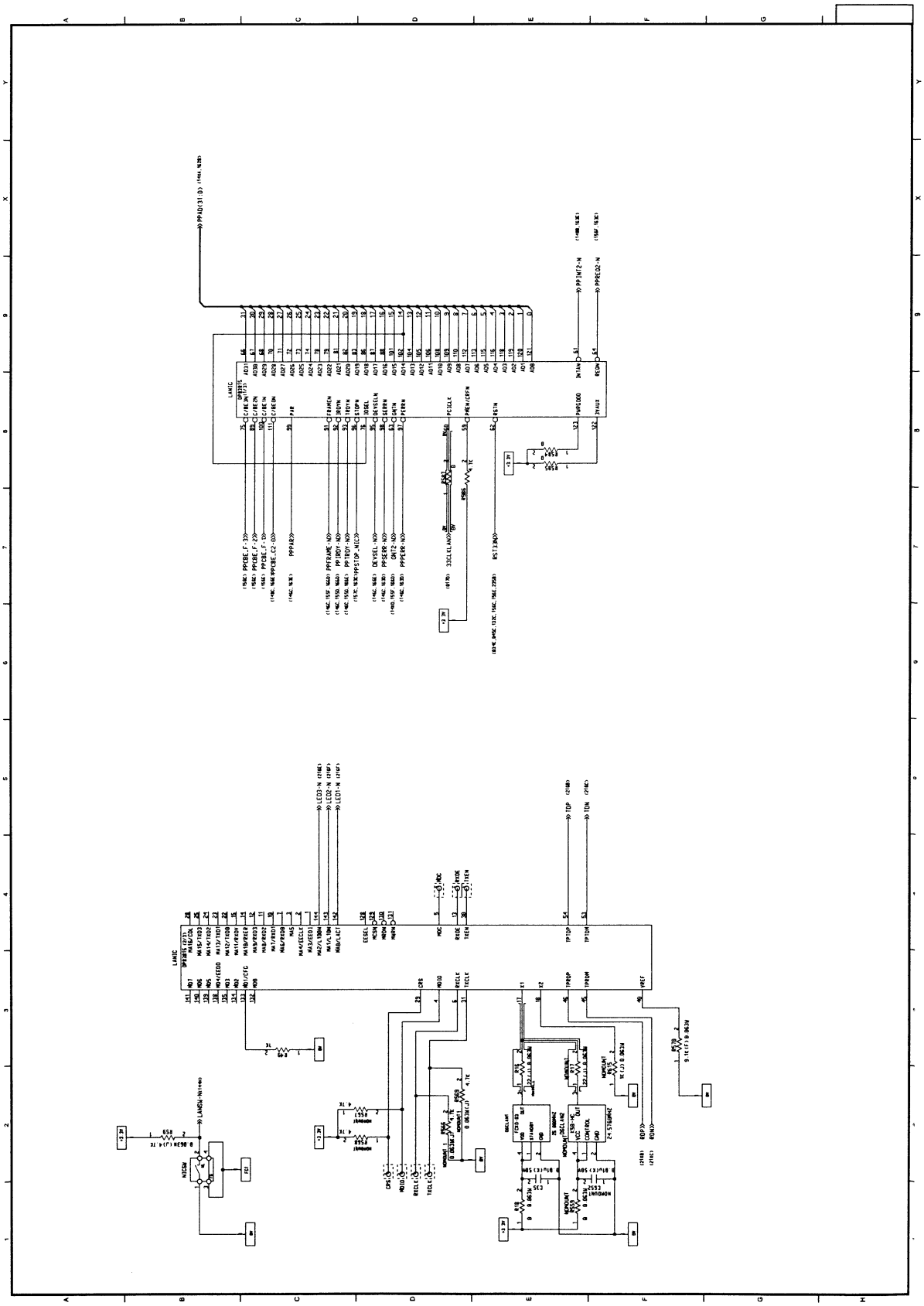


Figure 1-9 Main Controller PWB (OWL Rev.1) (20/25)

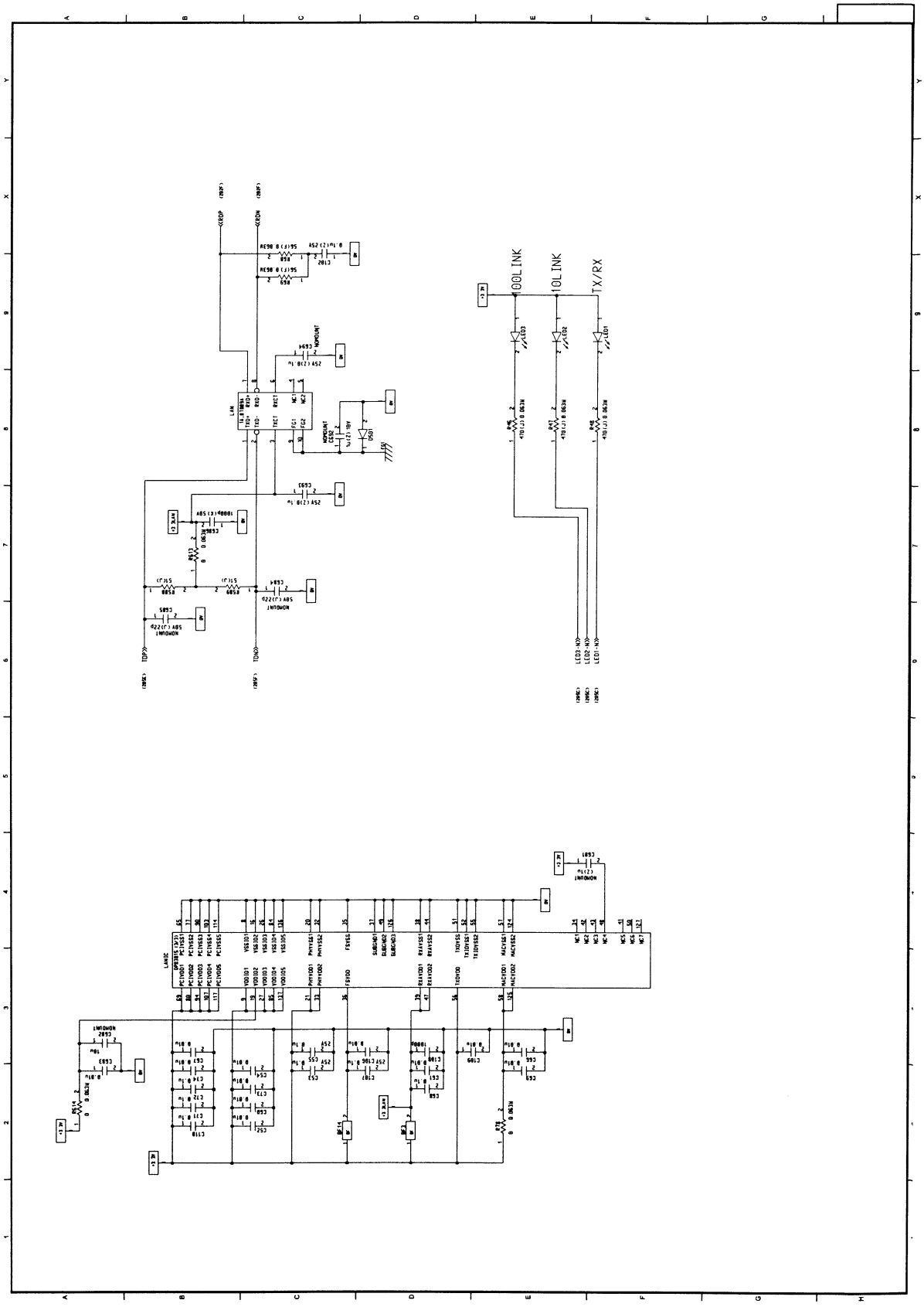


Figure 1-9 Main Controller PWB (OWL Rev.1) (21/25)

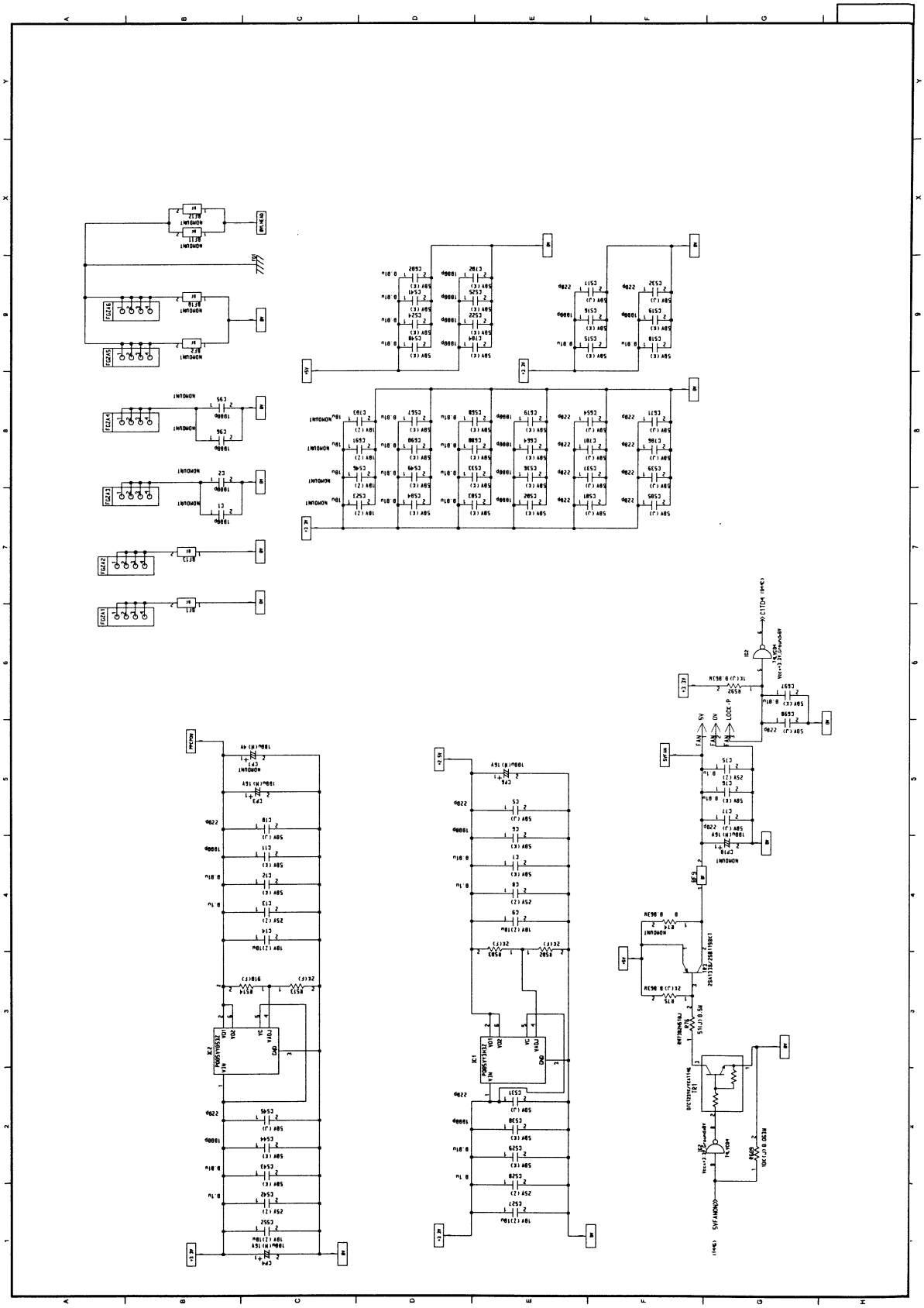


Figure 1-9 Main Controller PWB (OWL Rev.1) (22/25)

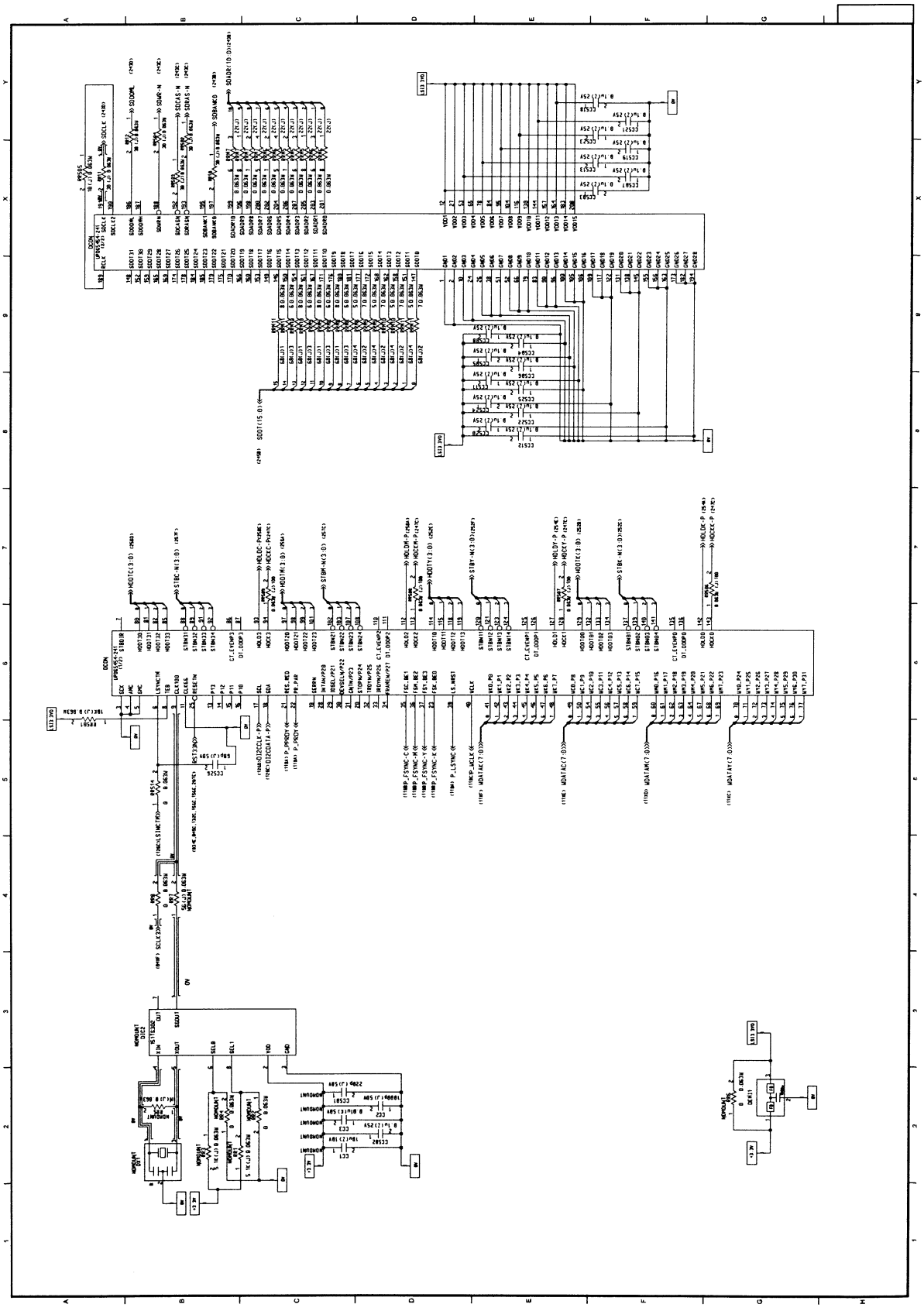


Figure 1-9 Main Controller PWB (OWL Rev.1) (23/25)

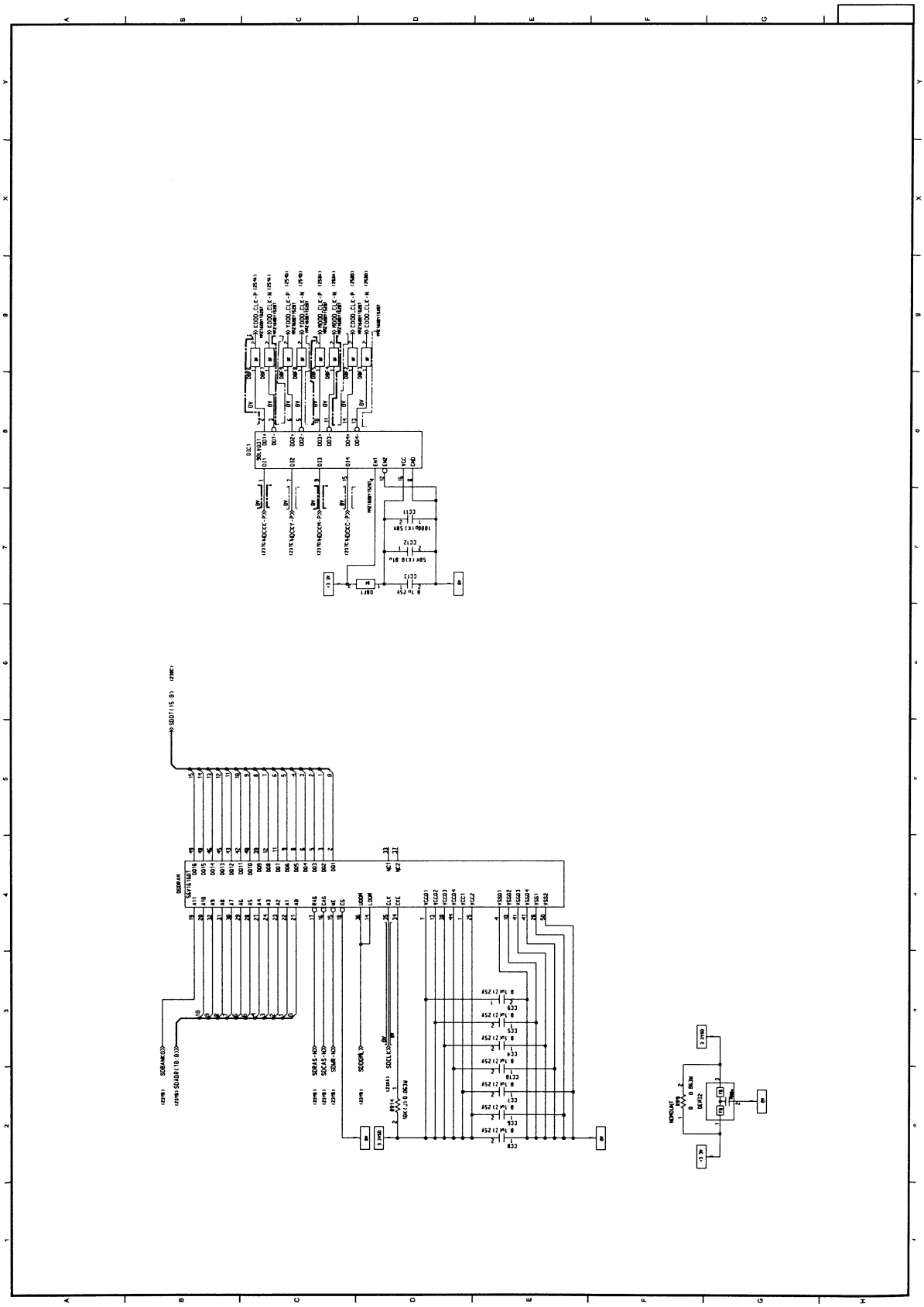


Figure 1-9 Main Controller PWB (OWL Rev.1) (24/25)

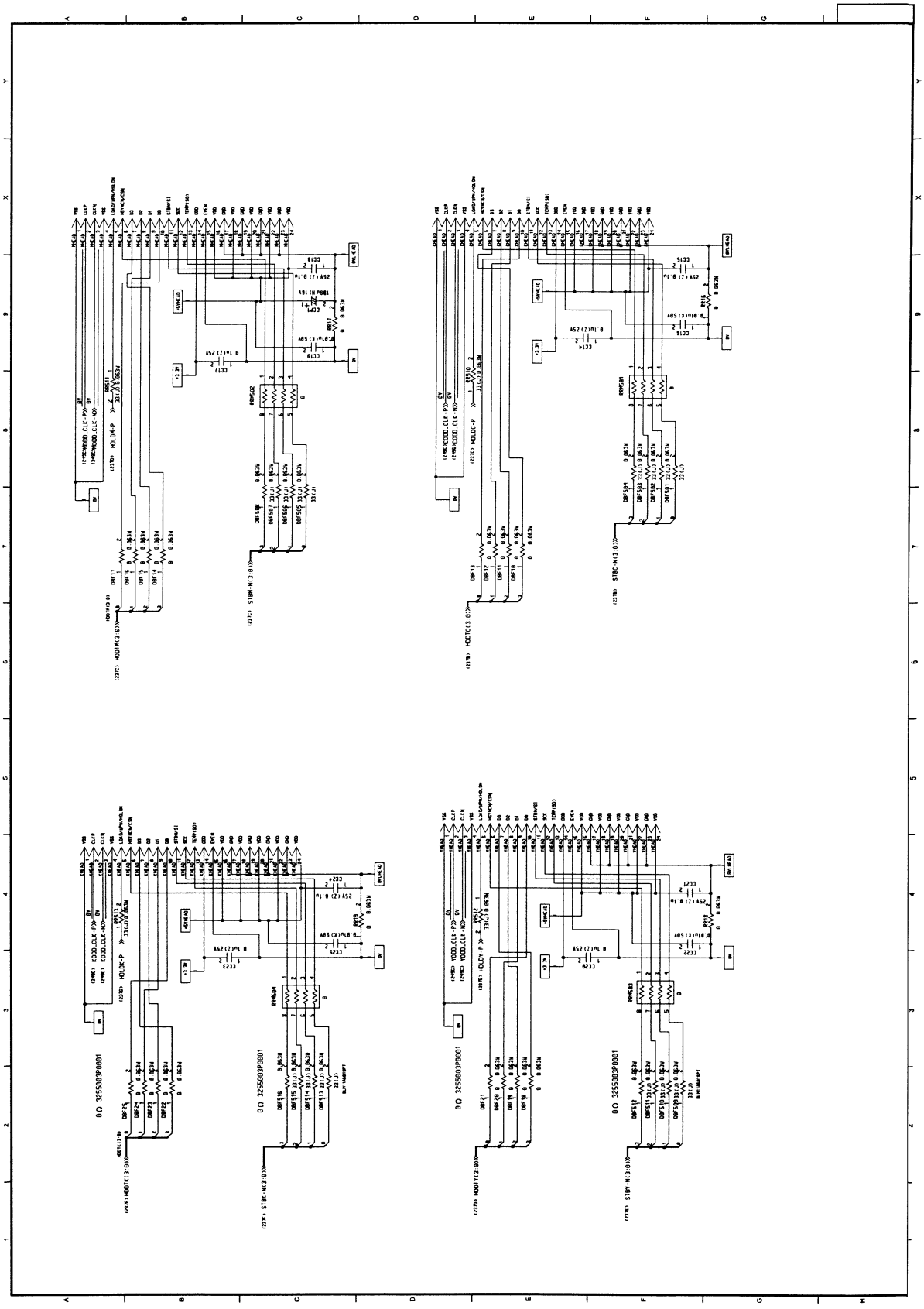


Figure 1-9 Main Controller PWB (OWL Rev.1) (25/25)

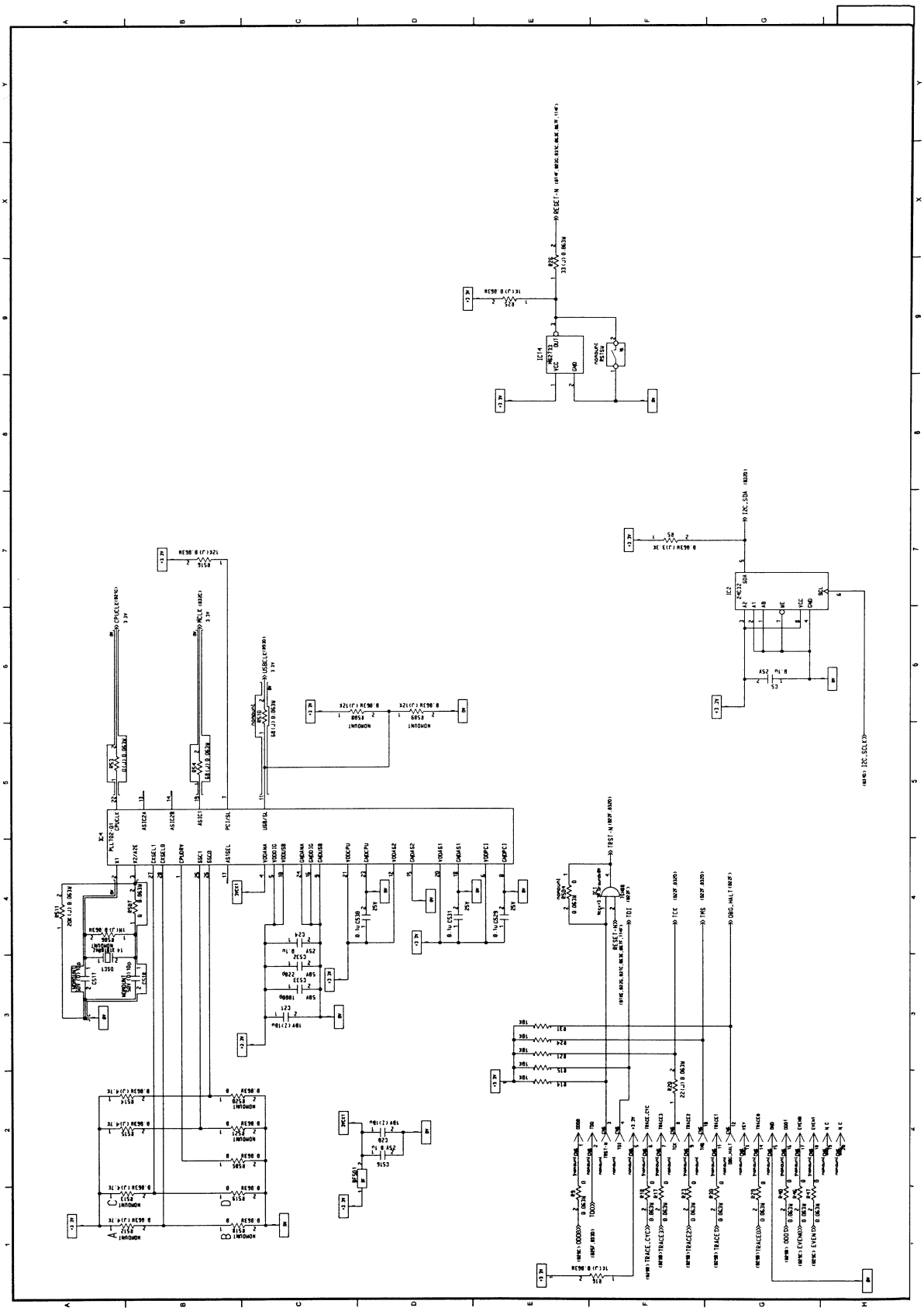


Figure 1-10 Main Controller PWB (ARC Rev.1) (1/15)

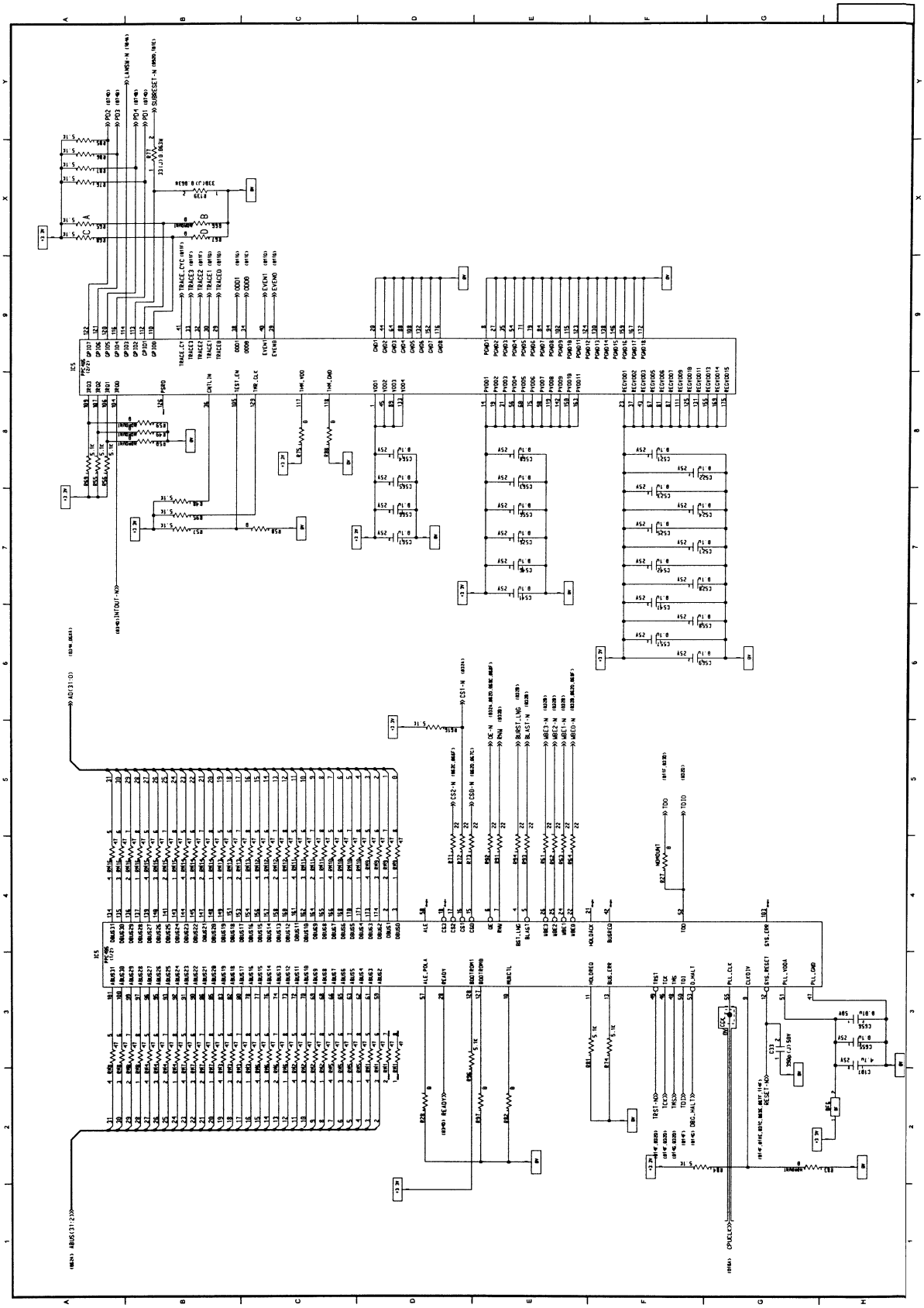


Figure 1-10 Main Controller PWB (ARC Rev.1) (2/15)

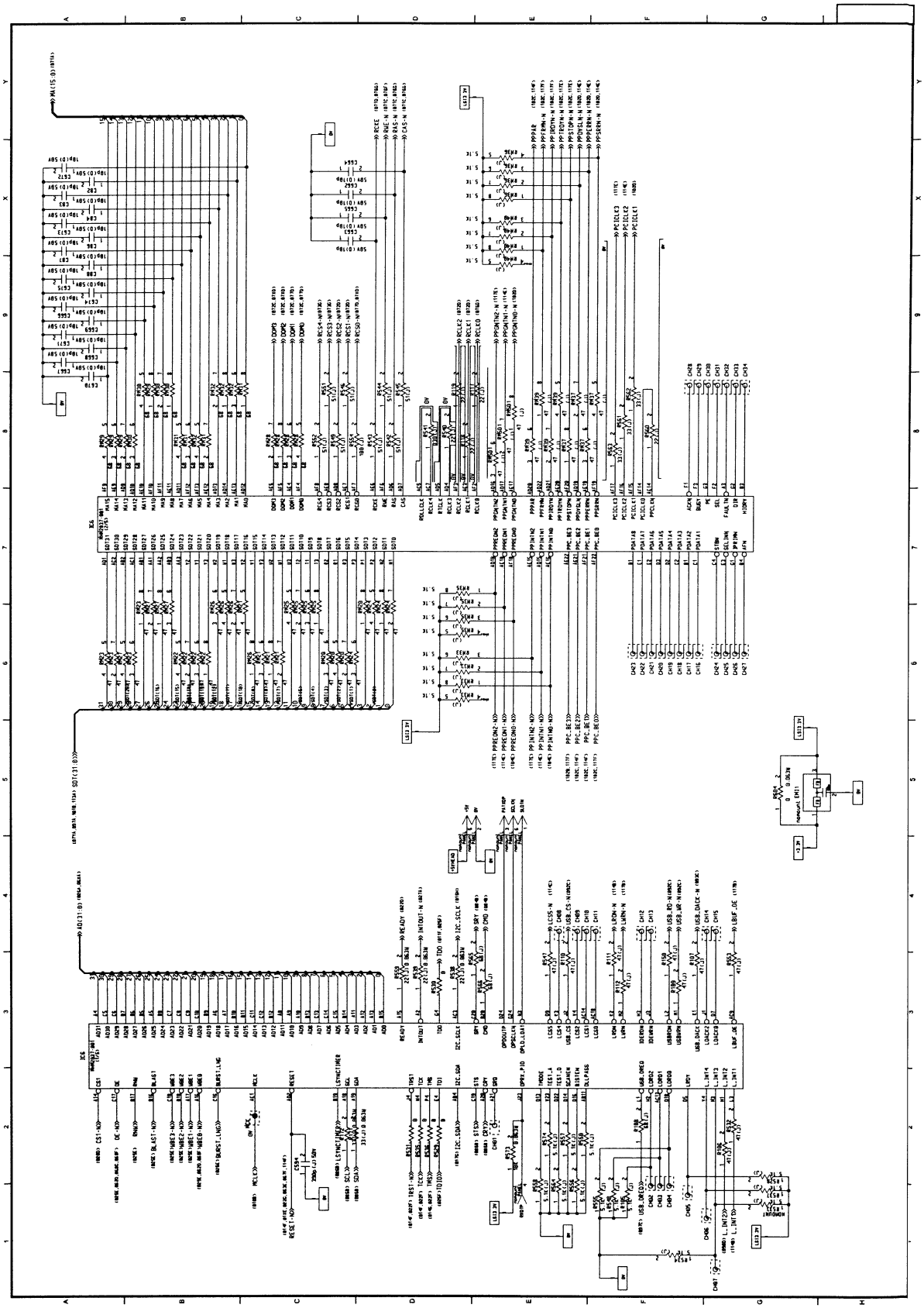


Figure 1-10 Main Controller PWB (ARC Rev.1) (3/15)

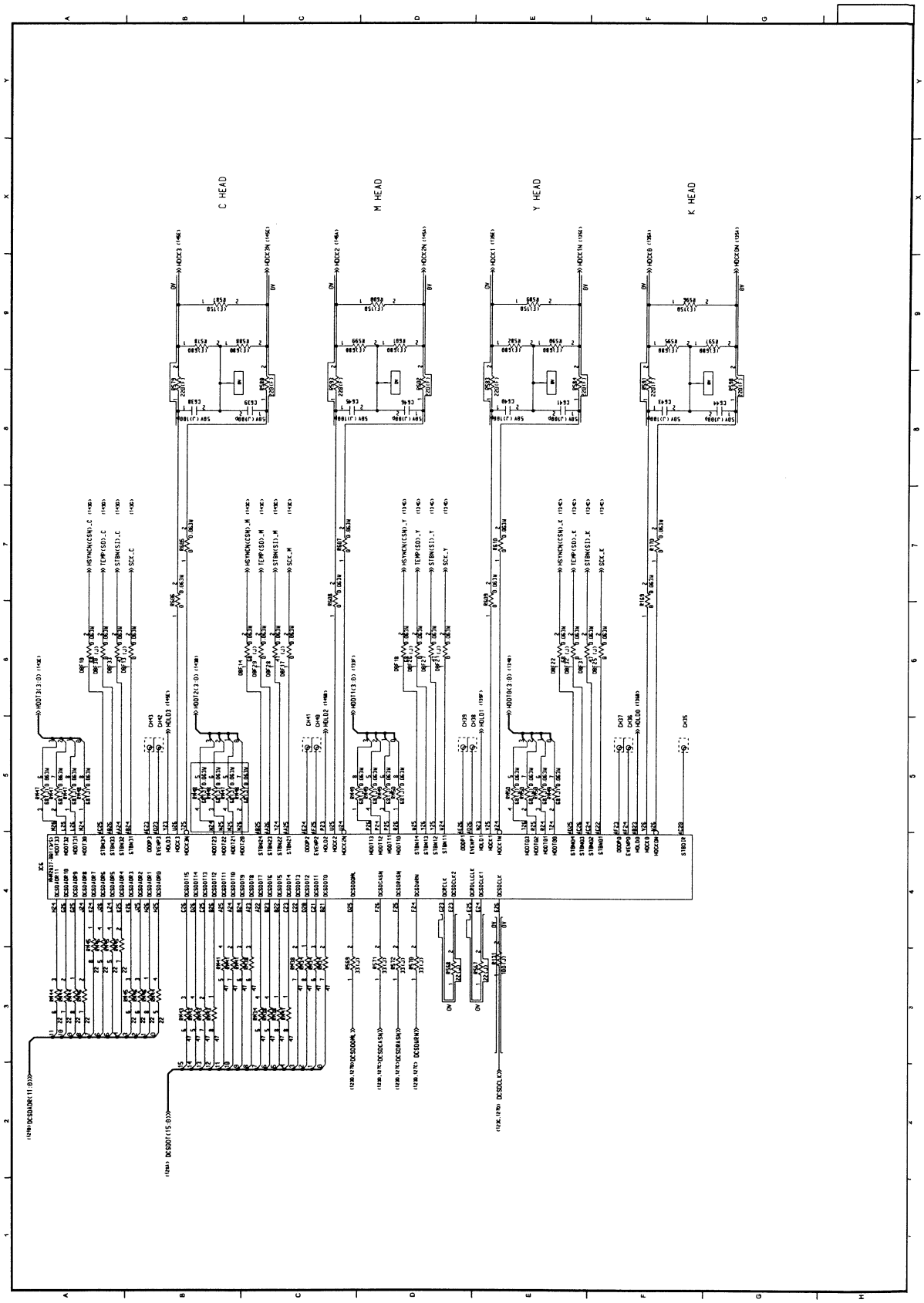


Figure 1-10 Main Controller PWB (ARC Rev.1) (4/15)

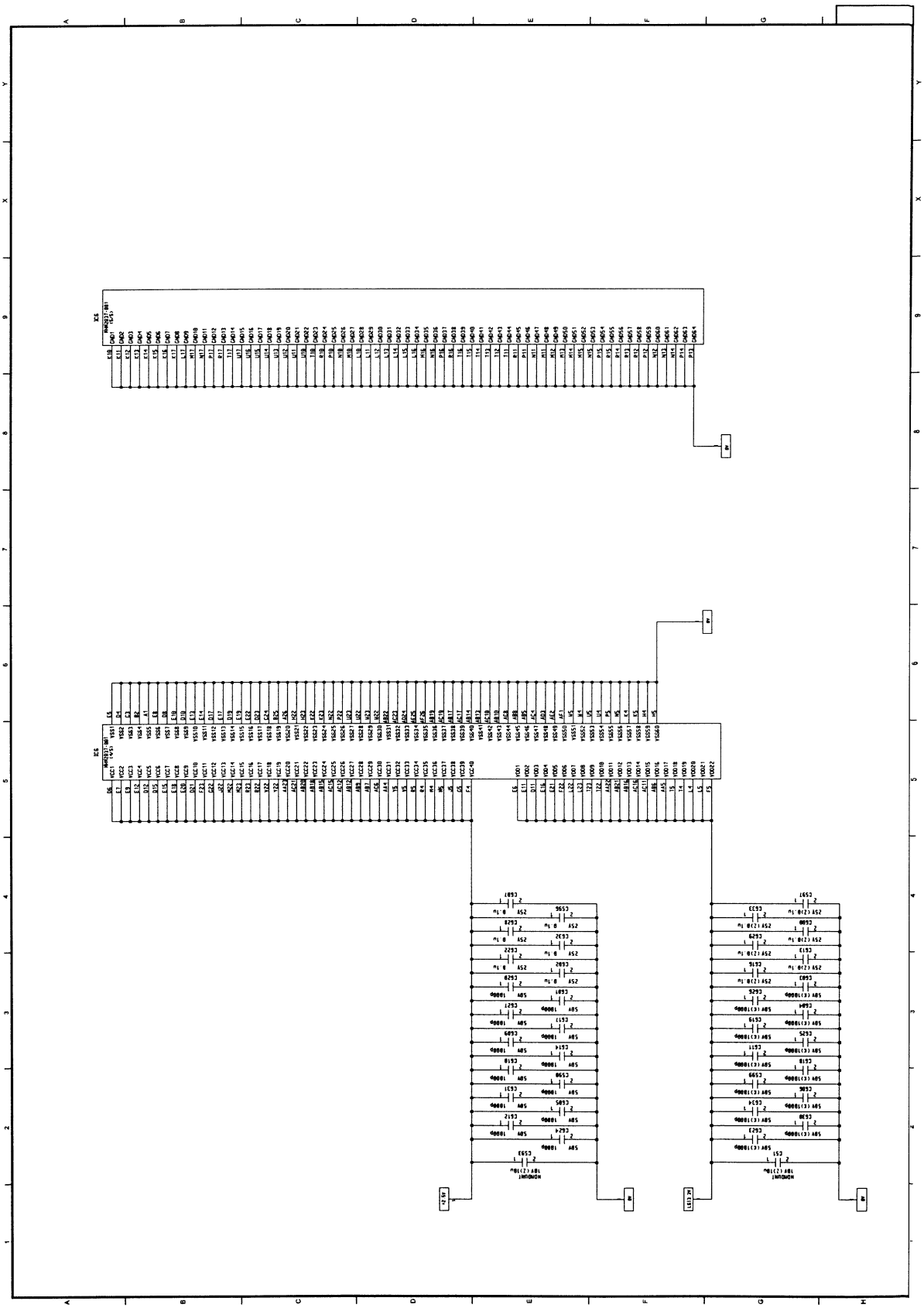


Figure 1-10 Main Controller PWB (ARC Rev.1) (5/15)

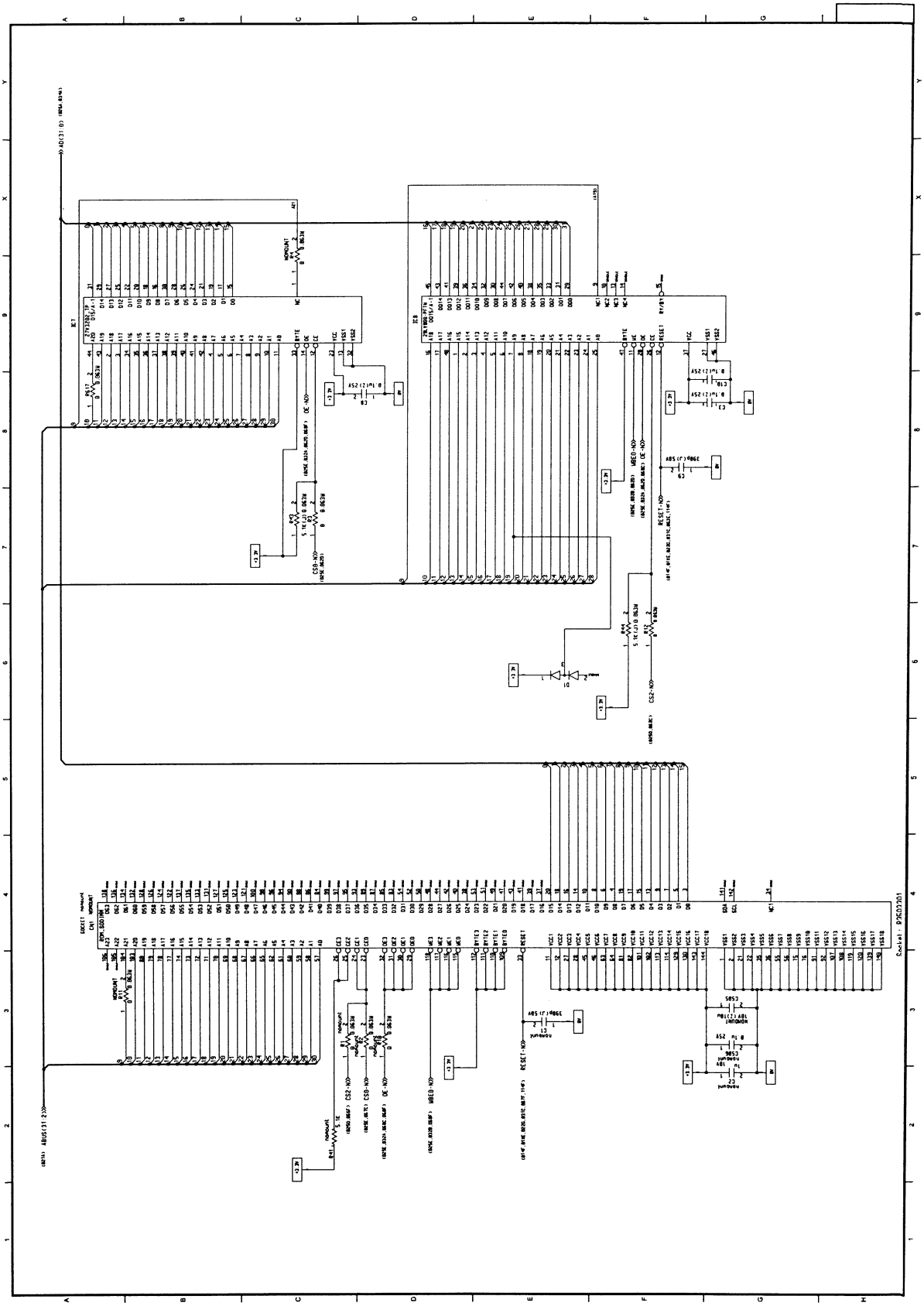


Figure 1-10 Main Controller PWB (ARC Rev.1) (6/15)

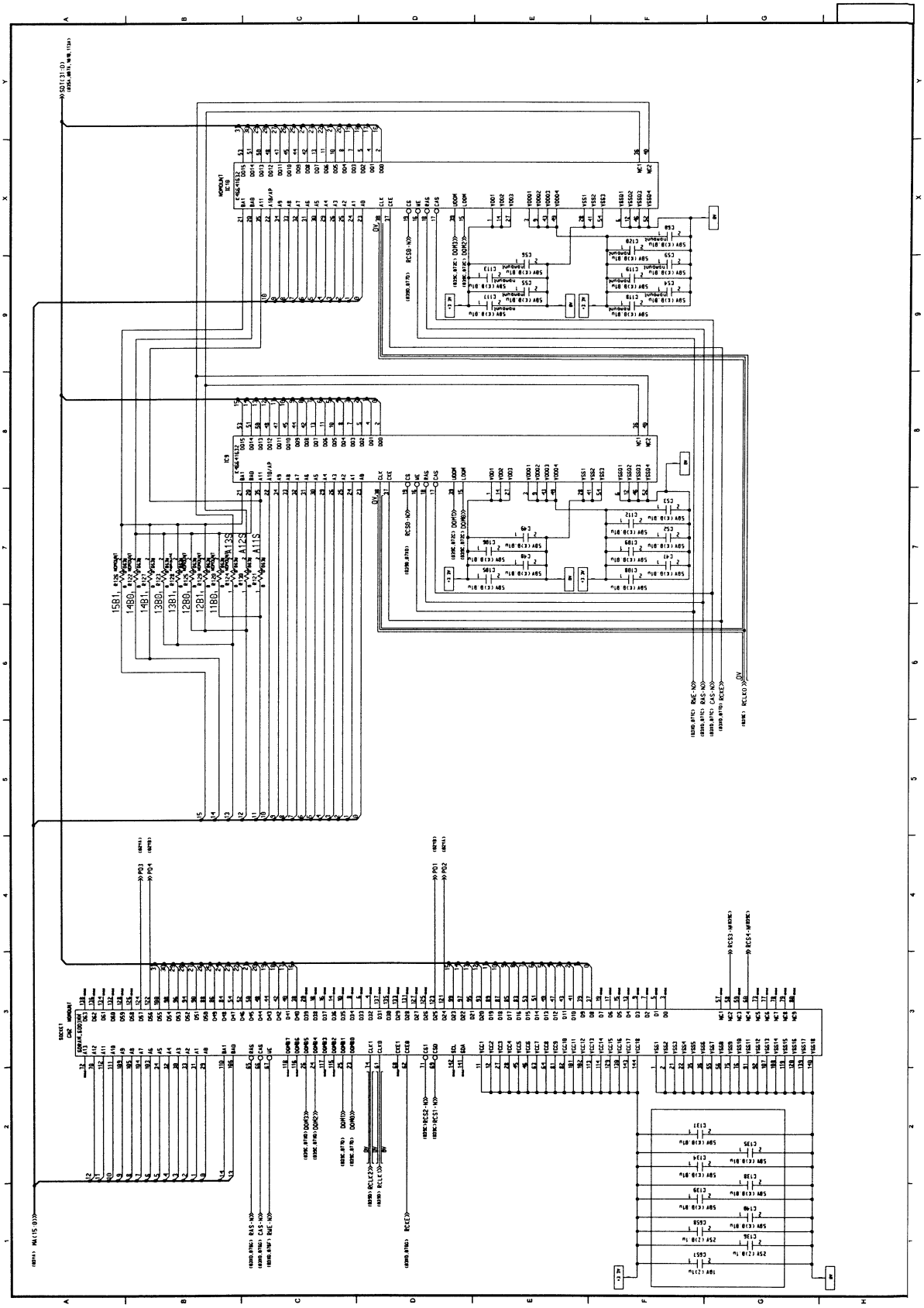


Figure 1-10 Main Controller PWB (ARC Rev.1) (7/15)

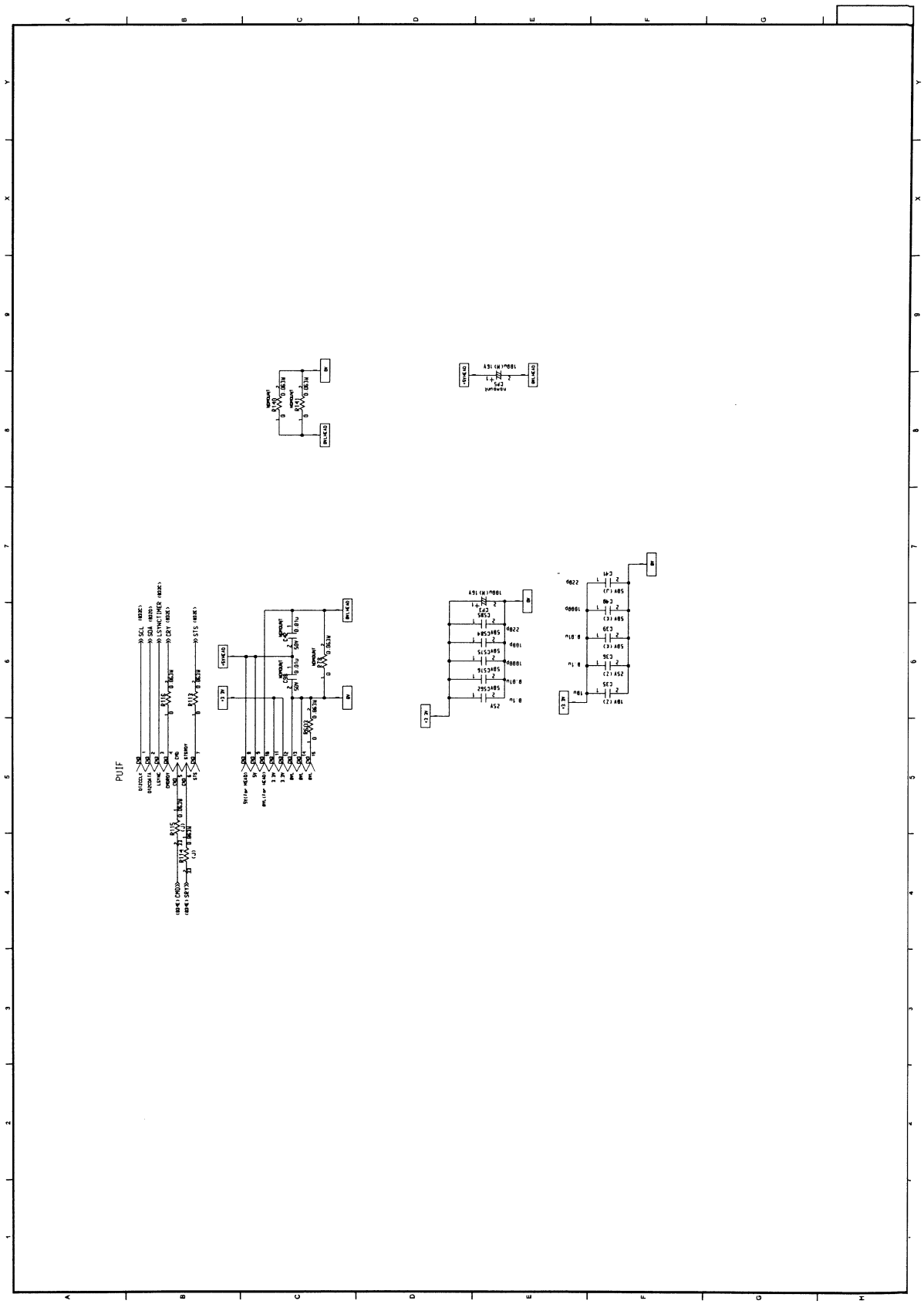


Figure 1-10 Main Controller PWB (ARC Rev.1) (8/15)

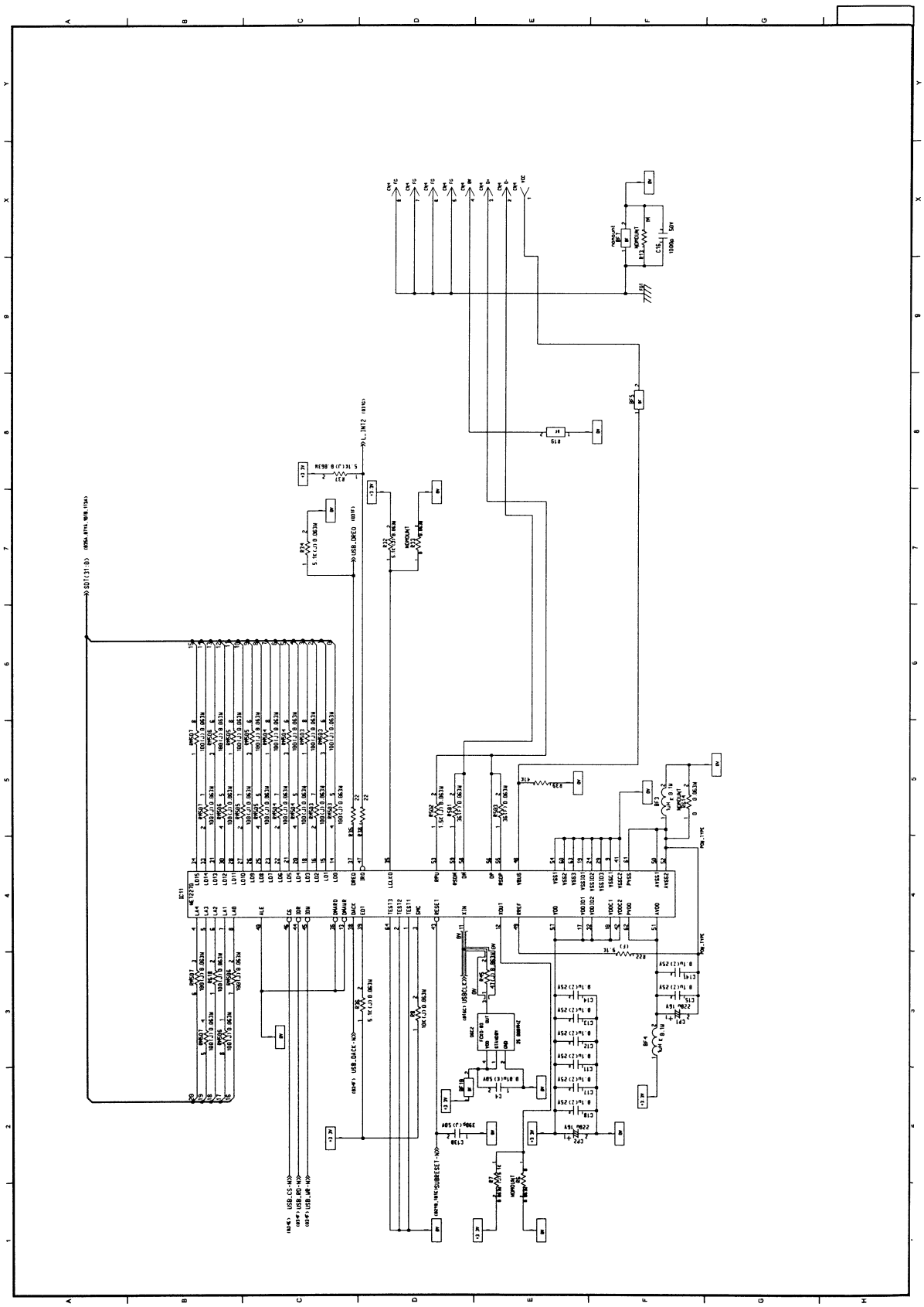


Figure 1-10 Main Controller PWB (ARC Rev.1) (9/15)

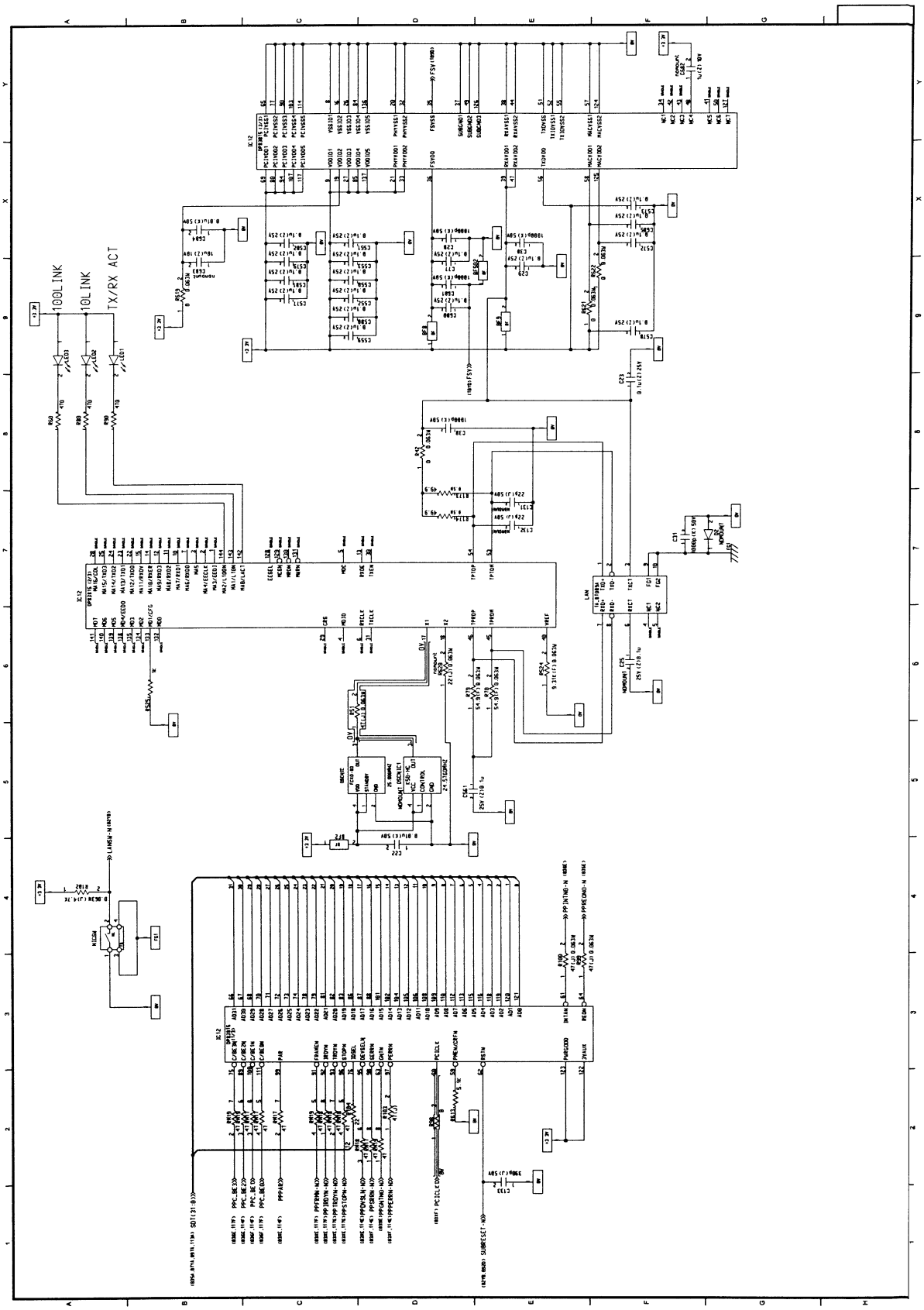


Figure 1-10 Main Controller PWB (ARC Rev.1) (10/15)

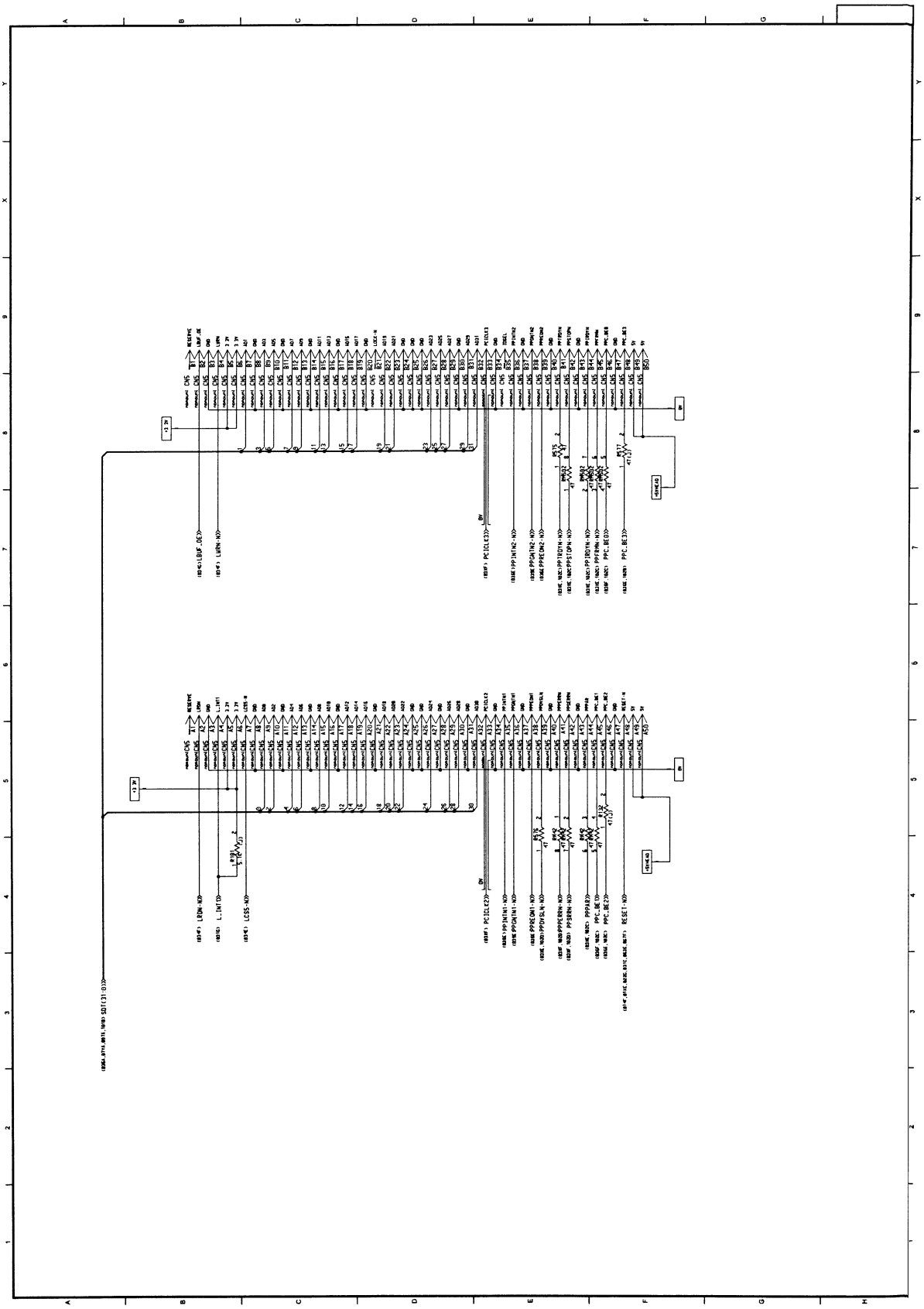


Figure 1-10 Main Controller PWB (ARC Rev.1) (11/15)

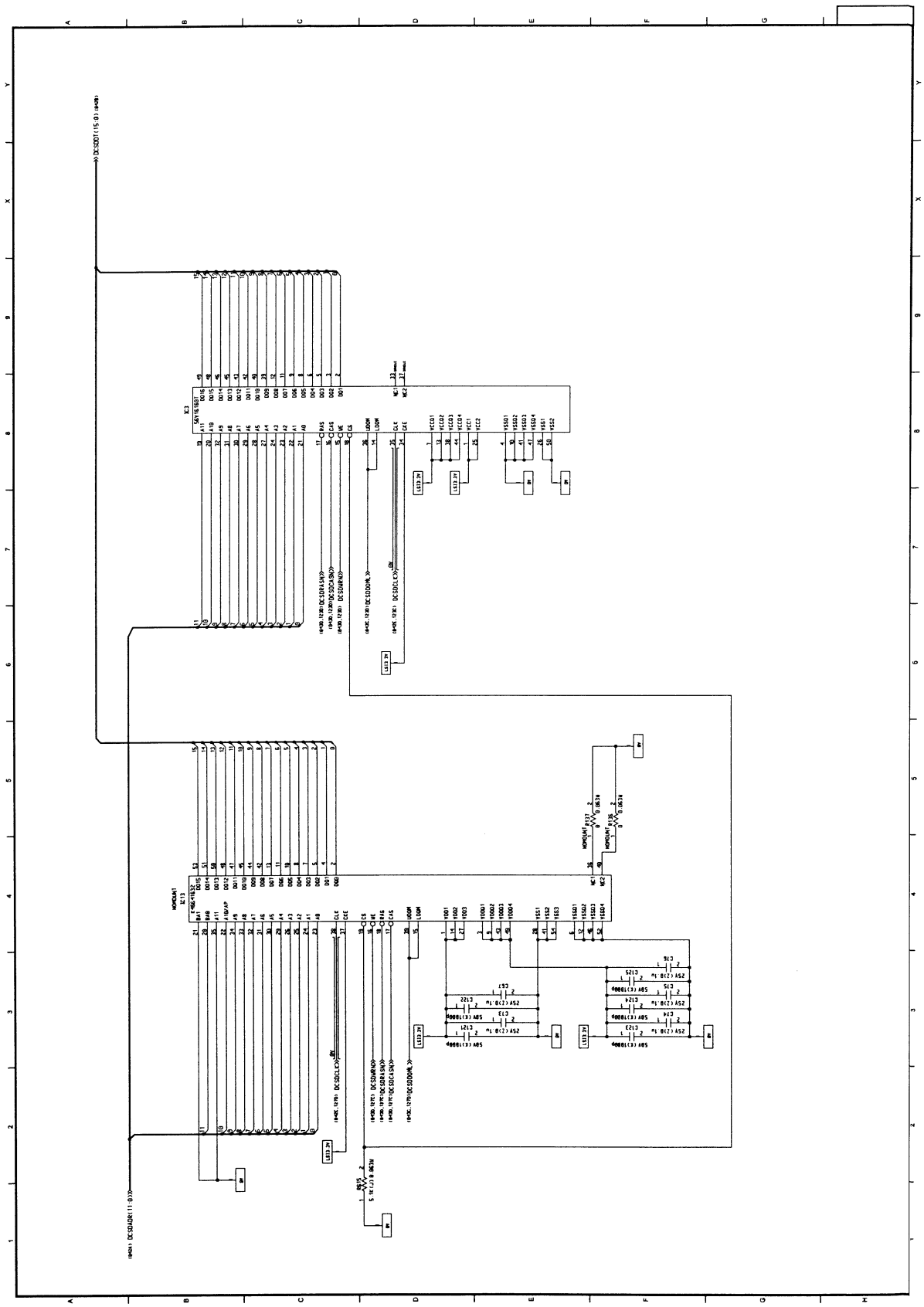


Figure 1-10 Main Controller PWB (ARC Rev.1) (12/15)

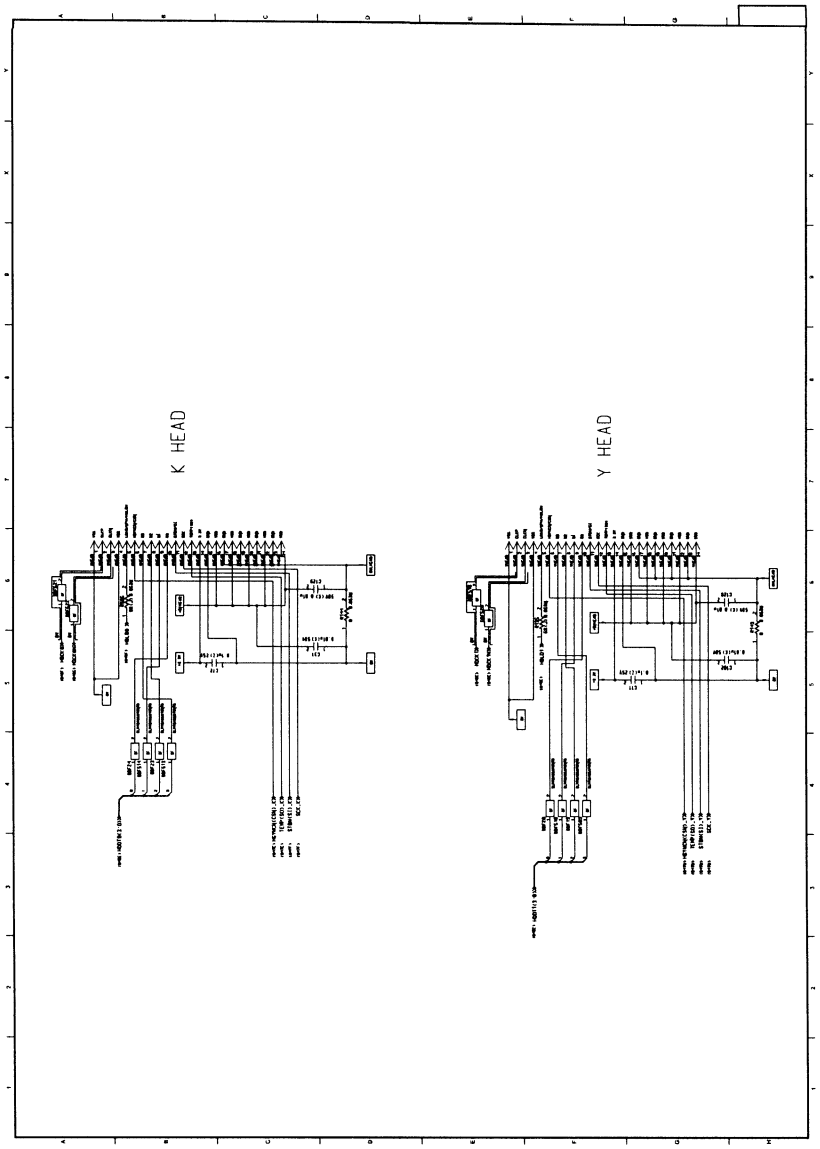


Figure 1-10 Main Controller PWB (ARC Rev.1) (13/15)

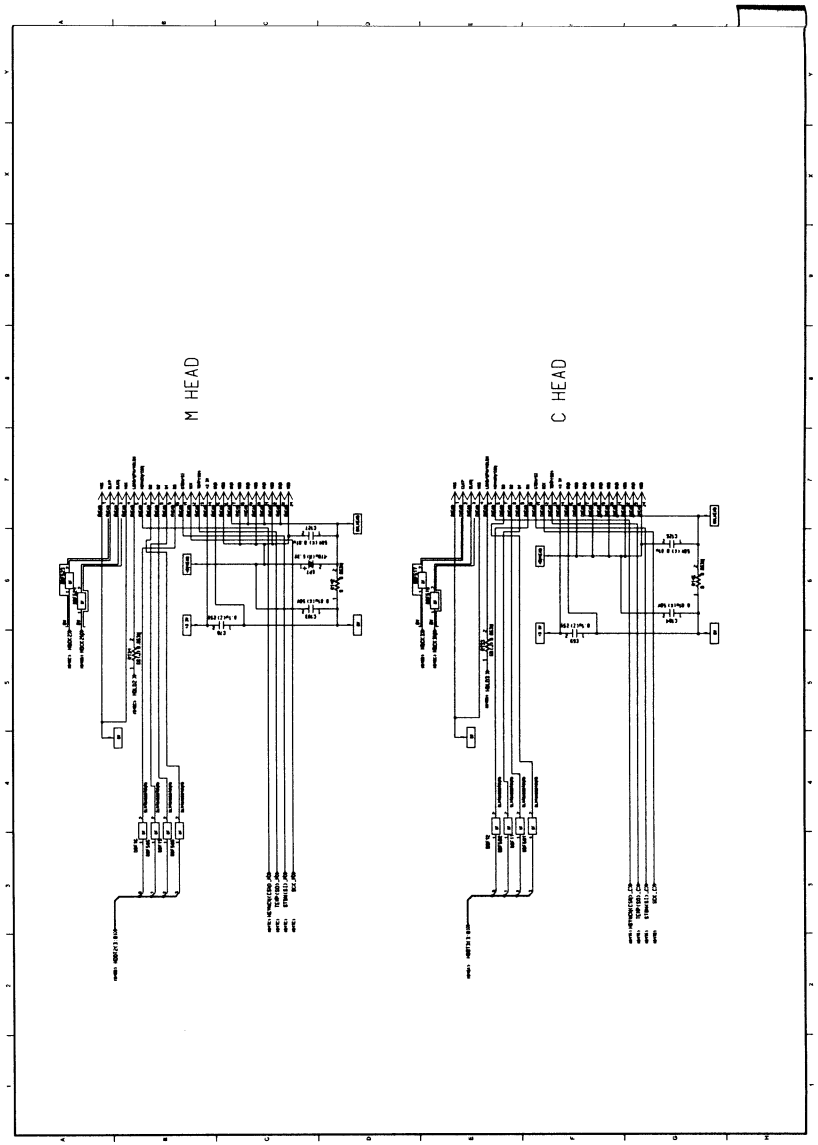


Figure 1-10 Main Controller PWB (ARC Rev.1) (14/15)

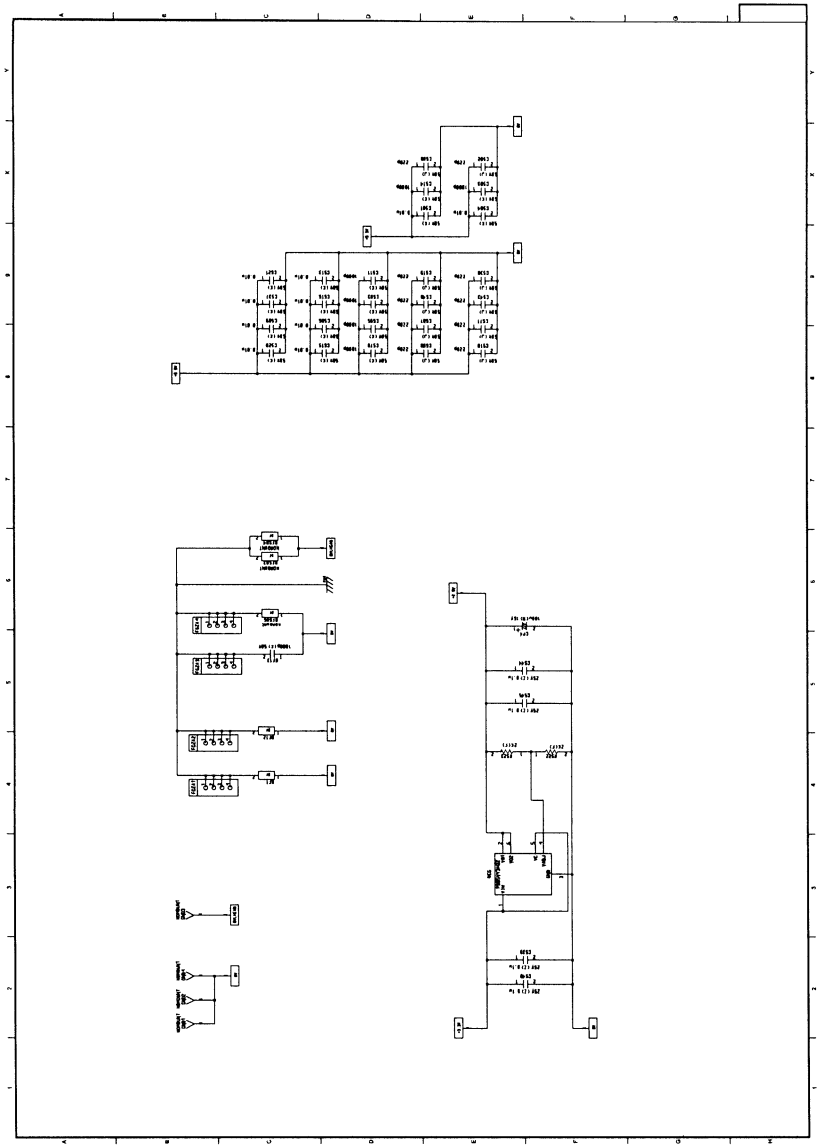
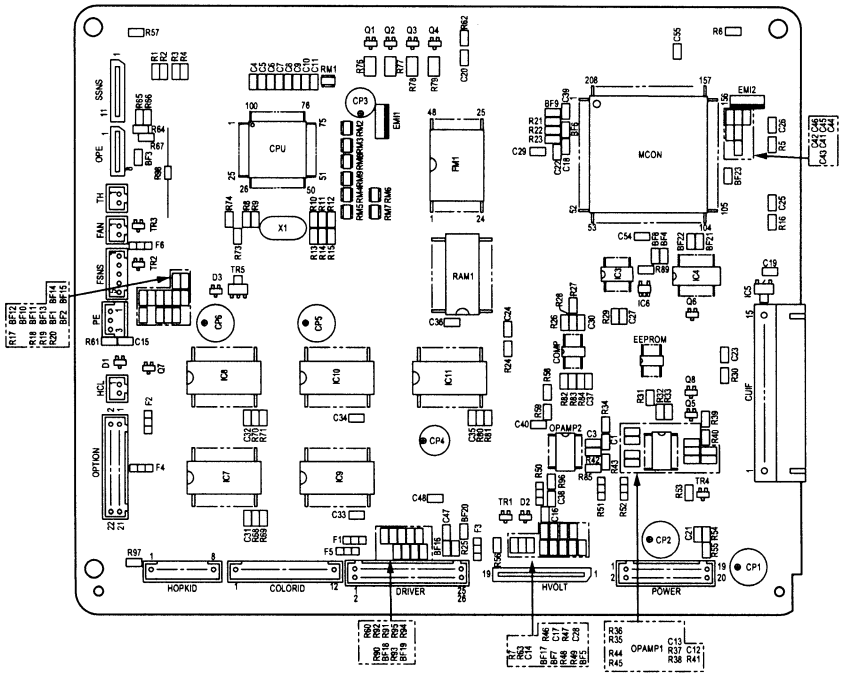


Figure 1-10 Main Controller PWB (ARC Rev.1) (15/15)

2. COMPONENT PARTS LIST

Print Engine Controller PWB	(RSN C5300/C5100)	41903401
Driver PWB	(RSM C5300/C5100)	41938801
Option Control PWB	(V7X C5300/C5100)	41768408
Duplex Control PWB	(V7X C5300/C5100)	41768409
Control Panel PWB	(RSP C5300/C5100)	41938501
Toner Low Sensor PWB	(PRD C5300/C5100)	41903701
Entrance Sensor PWB	(RSF C5300/C5100)	41938601
Color Registration Sensor PWB	(Z71 C5300/C5100)	41206401
Main Controller PWB	(OWL C5300)	41964401
Main Controller PWB	(ARC C5100)	41939101



RSN-PCB (Print Engine Controller PWB) C5300/C5100
(41903401-1/8)

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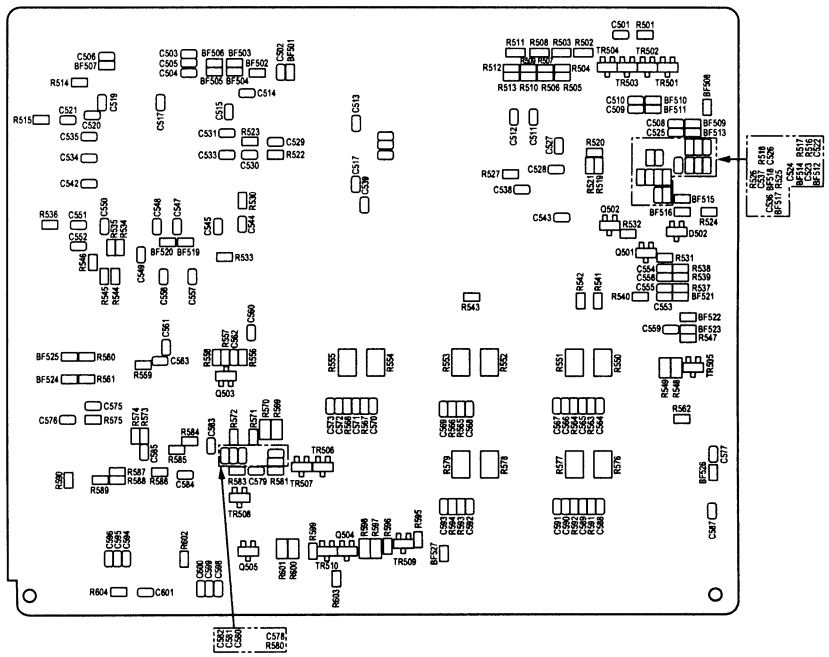

RSN-PCB (Print Engine Controller PWB) C5300/C5100
(41903401-2/8)

RSN-PCB (Print Engine Controller PWB) C5300/C5100 (41903401-3/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D1~D3, D502	SS100MA80VKCP D-Signal (CP)	611A0000N0002	4	
2					
3	R27, R32, R41, R68, R70, R80, R84	CR/RK73H/ERJ/MCRF102 RES-MET RN -C	3235003F0102	7	
4	R1~R4, R596, R599	CR/RK73H/ERJ/MCRF134 RES-MET RN -C	3235003F0134	6	
5	R38, R39, R69, R71, R81	CR/RK73H/ERJ/MCRF153 RES-MET RN -C	3235003F0153	5	
6	R83, R541, R556	CR/RK73H/ERJ/MCRF202 RES-MET RN -C	3235003F0202	3	
7	R504, R505, R509, R510, R558, R595, R603	CR/RK73H/ERJ/MCRF204 RES-MET RN -C	3235003F0204	7	
8	R557, R573, R589	CR/RK73H/ERJ/MCRF302 RES-MET RN -C	3235003F0302	3	
9	R28	CR/RK73H/ERJ/MCRF432 RES-MET RN -C	3235003F0432	1	
10	R26	CR/RK73H/ERJ/MCRF472 RES-MET RN -C	3235003F0472	1	
11	R524	CR/RK73H/ERJ/MCRF512 RES-MET RN -C	3235003F0512	1	
12	R60, R506, R507, R512, R513, R517, R590	CR/RK73H/ERJ/MCRF513 RES-MET RN -C	3235003F0513	7	
13	R5, R16, R24, R30, R61, R62, R501, R515, R522, R523, R530, R536, R540, R575, R584, R604	CR/RK73K/ERJ/MCRJ100 RES-MET RN -C	3235003J0100	16	
14	R46, R47, R49, BF519, BF520	CR/RK73K/ERJ/MCRJ101 RES-MET RN -C	3235003J0101	5	
15	R21~R23, R54, R63, R90~R96, R514, R516, R518, R526, R533~R535, R542, R543, R545	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	22	

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RSN-PCB (Print Engine Controller PWB) C5300/C5100 (41903401-4/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
16	R8, R13~R15, R35, R44, R45, R48, R53, R520, R546, R559~R561, R571, R572, R585	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	17	
17	R9, R519, R521	CR/RK73K/ERJ/MCRJ104 RES-MET RN -C	3235003J0104	3	
18	R563~R568, R591~R594	CR/RK73K/ERJ/MCRJ203 RES-MET RN -C	3235003J0203	10	
19	R527	CR/RK73K/ERJ/MCRJ300 RES-MET RN -C	3235003J0300	1	
20	R7, R17~R20, R29, R33, R36, R43, R58, R59, R89, R586, R587	CR/RK73K/ERJ/MCRJ332 RES-MET RN -C	3235003J0332	14	
21	R25, R73, R525, R537~R539, R547	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	7	
22	R31, R55, R56, R82, R544	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	5	
23	R531, R532	CR/RK73K/ERJ/MCRJ621 RES-MET RN -C	3235003J0621	2	
24	R34, R37, R40, R42, R580, R583	CR/RK73K/ERJ/MCRJ682 RES-MET RN -C	3235003J0682	6	
25	R10~R12	CR/RK73K/ERJ/MCRJ750 RES-MET RN -C	3235003J0750	3	
26	R64~R67	CR/RK73K/ERJ/MCRJ823 RES-MET RN -C	3235003J0823	4	
27	R50~R52	CR1/8 750 JV RES-MET RN -C	3235015J0750	3	
28	R550~R555, R576~R579	CR1/4 1R0 JV RES-MET RN -C	3235020J0109	10	
29	R76~R79, R502, R503, R508, R511, R548, R549, R569, R570, R597, R598, R600, R601	RM73B2A202J RES RN (CP)	323A5003J0202	16	
30	R98	RSS2YVTP-75ohmJ RES-MET OX -Q	3241024J0750	1	

RSN-PCB (Print Engine Controller PWB) C5300/C5100 (41903401-5/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
31	R6, R57, R74, R85, R97, R562, R574, R581, R588, R602	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	10	
32	RM1~RM5, RM8, RM9	CN1J/EXB/BCN100ohmJ RES-Block -C	3345003J0101	7	
33	RM6, RM7	CN1J/EXB/BCN5.1KohmJ RES-Block -C	3345003J0512	2	
34					
35	C14, C16~C18, C28, C29, C38, C41~C46, C55, C502~C506, C520, C523, C524, C536, C552, C563, C575, C587	GRM/UMK/MCH/391CH CAP-Ceramic -C	3033003C0391	27	
36	C21, C22, C27, C39, C54, C508~C510, C525, C537, C549, C559	GRM/UMK/MCH/680CH CAP-Ceramic -C	3033003C0680	12	
37	C15, C20, C23~C26, C30, C501, C521, C529, C530, C544, C551, C553, C562, C564, C565, C568~C571, C576, C583, C588, C589, C592, C593, C601	GRM/UMK/MCH/102B 50V CAP-Ceramic -C	3036003K0102	28	
38	C4, C5, C514, C543	GRM/UMK/MCH/103B 50V CAP-Ceramic -C	3036003K0103	4	
39	C3, C578	GRM/ TMK/ MCH/223B 25V CAP-Ceramic -C	3036003K0223	2	
40	C1, C40, C47, C48, C554~C556, C566, C567, C572, C573, C579, C584, C590, C591	GRM/TMK/MCH/473B 25V CAP-Ceramic -C	3036003K0473	15	
41	C6~C11, C19, C31~C37, C511~C513, C515, C517, C519, C522, C526~C528, C531, C533~C535, C538, C539, C542, C545, C547, C548, C550, C557, C558, C560, C561, C577, C580~C582, C585, C594, C598~C600	GRM/ TMK/ MCH/ 104Z 25V CAP-Ceramic -C	3036003Z0104	48	

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RSN-PCB (Print Engine Controller PWB) C5300/C5100 (41903401-6/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
42	C12, C13, C595, C596	GRM/LMK/MCH/105Z 10V CAP-Ceramic -C	3036003Z0105	4	
43	CP1, CP2	KMG10VB-470M-FC 10V CAP-CE 470µF	304A1180A1471	2	
44	CP3	KMG25VB-100M-FC 25V CAP-CE 100µF	304A1180E1101	1	
45	CP5, CP6	KMG50VB-100M-FC 50V CAP-CE 100µF	304A1180H1101	2	
46	CP4	KMG50VB-47M-FC 50V CAP-CE 47µF	304A1180H1470	1	
47					
48					
49	IC4	74LS07FP Digital IC-BIP (SO)	700A0503N0007	1	
50	IC3	74AHCT245PW/PWR Digital IC-MOS -B	7022903N3245	1	
51	MCON	UPD65946GD-137-LML Digital IC-MOS -F	7024923N1173	1	
52	OPAMP1, OPAMP2	LMV324IDR Analog-BILPLIN -B	7200050N0001	2	
53	IC7~IC11	TA84002F(EL) Analog-BIPLIN -B	7201825N0001	5	
54	IC6	M62782GP-C60J Analog-BIPLIN -C	7204022N0001	1	
55	IC5	M62733ML-600C Analog-BIPLIN -C	7204022N0002	1	
56	COMP	UPC393G2 BIPLIN-IC (SO)	720A0523N0011	1	
57	RAM1	52256CN-70LL MemoryIC-MOSSRAM -S	8040003N8303	1	
58	EEPROM	M93C66-WMN6T MemoryIC-MOSEEPR -S	8162335N0000	1	

RSN-PCB (Print Engine Controller PWB) C5300/C5100 (41903401-7/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
59	CPU	MSM66577-019TB CPU-MOS(ROM) -F	8530351N0005	1	
60	FM1	PX714/715 PU FLASH	42136001	1	
61					
62	TR1~TR3, TR501~ TR505, TR509, TR510	2SA1338/2SB1198KT TR-PNP/H -C	6001003N0002	10	
63	Q8	2SA1520/RN2427 TR-PNP/H -C	6001103N0001	1	
64	Q1~Q5, Q7, Q502~Q505	DTC123YK/YKAT146 TR-NPN/H -C	6021003N0004	10	
65	Q6, Q501	DTC124EKAT146 TR-NPN/H -C	6021035N0004	2	
66	TR4, TR506~TR508	2SC3361/2SC2412KVL NPN-HF-TR (CP)	602A1003N0002	4	
67	TR5	2SD1472 NPN-LF-TR (CP)	603A1121N0007	1	
68					
69	POWER	B20B-PHDSS Connector-PCB -	2243004P0200	1	
70	OPTION	B22B-PHDSS Connector-PCB -	2243004P0220	1	
71	DRIVER	B26B-PHDSS Connector-PCB -	2243004P0260	1	
72	CUIF	S15B-XH-A Connector-PCB -	2243014P0150	1	
73	OPE	04 6232 108 008 800 Connector-PCB -B	2243105P0080	1	
74	SSNS	04 6232 111 008 800 Connector-PCB -B	2243105P0110	1	
75	HVOLT	04 6232 119 008 800 Connector-PCB -B	2243105P0190	1	

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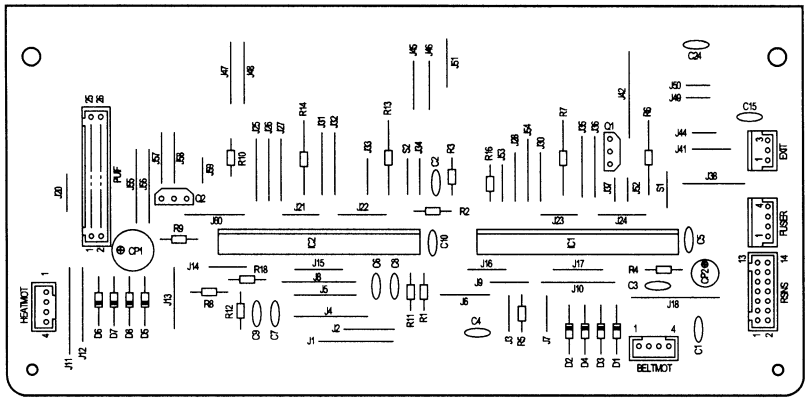
RSN-PCB (Print Engine Controller PWB) C5300/C5100 (41903401-8/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
76	TH	B2B-PH-K-R Connector-PCB -B	2243500P0021	1	
77	FAN	B2B-PH-K-Y Connector-PCB -B	2243500P0022	1	
78	PE	175487-3 Connector-PCB -B	2244005P0030	1	
79	HCL	B2B-PH-K-S Connector-PC	224A3529P0020	1	
80	FSNS	B5B-PH-K-S Connector-PC	224A3529P0050	1	
81	HOPKID	B8B-PH-K-S Connector-PC	224A3529P0080	1	
82	COLORID	B12B-PH-K-S Connector-PC	224A3529P0120	1	
83					
84	X1	CSTLA28M0X51-A0 OSC-Ceramic -P	3811004B0004	1	
85					
86	BF508, BF515, BF521, BF522, BF526, BF527	BLM18PG300SN1D Core -C	1055001C0001	6	
87	BF1~BF23, BF501~ BF507, BF509~ BF514, BF516~BF518, BF523~ BF525	BLM18BD182SN1D Core -C	1055001C0002	42	
88	EMI1, EMI2	ZJSC-R47-181 EMI Filter	324A1012P1181	2	
89					
90	F1~F6	429-002WR FUSE -C	5402205S7202	6	



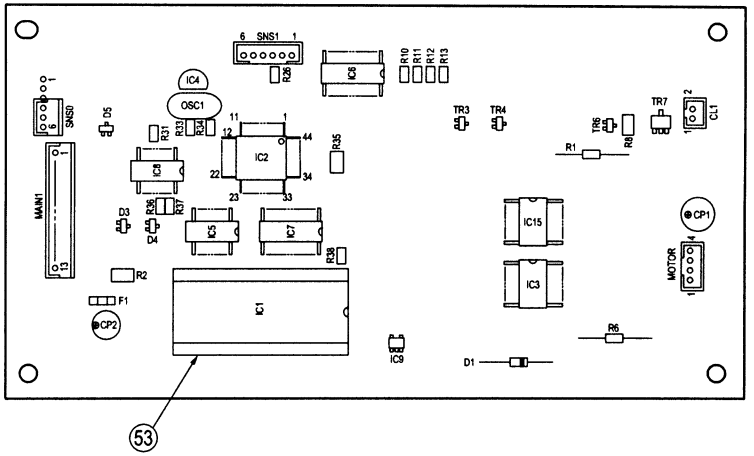
RSM-PWB (Driver PWB)
(41938801-1/3)

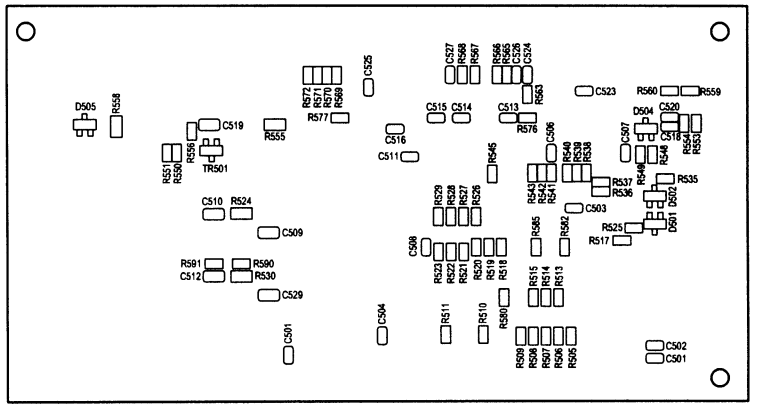
RSM-PWB (Driver PWB)
(41938801-2/3)

REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
1	D1~D8	D1NS4-4060 D-Rectifying	-Q	6100327M0001	8	
2						
3	R1, R8	SN14K/RNM1/4-912 RES-MET RN	-Q	3231203F0912	2	
4	R2, R9	SN14KRNM1/4-102F RES-MET RN	-Q	3231203F0102	2	
5	R3, R10	SN14KRNM1/4-153F RES-MET RN	-Q	3231203F0153	2	
6	R16, R18	NAT1/4/RD166S-103J RES-MET RN	-C	3211003J0103	2	
7	R4, R5, R11, R12	NAT1/4/RD166S-5103J RES-MET RN	-C	3211003J0513	4	
8	R6, R7, R13, R14	RNS1-0.51ΩJ RES RS	(CP)	324A1012J0518	4	
9						
10	C3, C4, C8, C9	RD16XR/CK92C1H681 CAP-Ceramic	-P	3034003M3681	4	
11	C2, C5, C7, C10, C15	CK92C1H104MS CAP-CK	50V 0.1μF	303A4115M3104	5	
12	C1, C6	CK92C1H473MS CAP-CK	50V 0.047μF	303A4115M3473	2	
13	CP2	UVX/SME-16V-47μF CAP-Alum	16V -P	3041003C1470	1	
14	CP1	KMG50VB-100M-FC CAP-CE	50V 100μF	304A1180H1101	1	
15						
16	Q1, Q2	DTC114ESA NPN-HF-TR		602A1035M0007	2	
17	IC1, IC2	MTD2123 Analog-BIPLIN	-	7201816M0002	2	

RSM-PWB (Driver PWB)
(41938801-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18					
19	RSNS	B14B-PHDSS Connector-PCB -	2243004P0140	1	
20	PUIF	B26B-PHDSS Connector-PCB -	2243004P0260	1	
21	EXIT	175487-3 Connector-PCB -	2244005P0030	1	
22	FUSER	175487-4 Connector-PCB -	2244005P0040	1	
23	BELTMOT, HEATMOT	B4B-PH-K-S PC Connector	224A3529P0040	2	
24					
25	J37, J44, J49, J50, J52, J59, C24	SHORT WIRE	TA-0.6	7	L=55mm P=5.0mm
26	J3, J7, J9, J14, J16, J20, J21, J23, J33, J34, J41, J53, S1, S2	SHORT WIRE	TA-0.6	14	L=55mm P=7.5mm
27	J2, J6, J15, J17, J22, J24, J28, J30, J45, J46, J51, J57, J58	SHORT WIRE	TA-0.6	13	L=55mm P=10.0mm
28	J5, J13, J25~J27, J31, J32, J35, J36, J38, J47, J48, J54, J60	SHORT WIRE	TA-0.6	14	L=55mm P=12.5mm
29	J1, J4, J8, J10, J12, J55, J56	SHORT WIRE	TA-0.6	7	L=55mm P=15.0mm
30	J11, J18, J42	SHORT WIRE	TA-0.6	3	L=55mm P=17.5mm





V7X-PWB (Option Control PWB) C5300/C5100
(41768408-1/5)

V7X-PWB (Option Control PWB) C5300/C5100 (41768408-2/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D4, D501, D504	SS100MA80VACP D-Signal (CP)	611A0000N0001	3	
2	D3, D5, D502, D505	SS100MA80VKCP D-Signal (CP)	611A0000N0002	4	
3	D1	SHORT WIRE	TA-0.6	1	L=55mm P=15.0mm
4					
5	R551	CR/RK73H/ERJ/MCRF123 RES-MET RN -C	3235003F0123	1	
6	R550,R556	CR/RK73H/ERJ/MCRF162 RES-MET RN -C	3235003F0162	2	
7	R10~R13, R517, R525, R535, R548, R549, R554, R559, R565, R568	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	13	
8	R38, R511, R519~R523, R526~R529, R536~R543, R569~R572	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	23	
9	R591	CR/RK73K/ERJ/MCRJ203 RES-MET RN -C	3235003J0203	1	
10	R31	CR/RK73K/ERJ/MCRJ222 RES-MET RN -C	3235003J0222	1	
11	R505~R510, R513~R515, R518	CR/RK73K/ERJ/MCRJ330 RES-MET RN -C	3235003J0330	10	
12	R553, R560, R566, R567	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	4	
13	R36, R37, R563, R590	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	4	
14	R555	RM73B2A272J RES RN (CP)	323A5003J0272	1	
15	R524, R530	RM73B2A333J RES RN (CP)	323A5003J0333	2	
16	R8, R558	RM73B2A392J RES RN (CP)	323A5003J0392	2	
17	R2, R35, R501	2125JPW RN RESISTOR (CP)	323A5003P0001	3	

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V7X-PWB (Option Control PWB) C5300/C5100 (41768408-3/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R1, R6	RNS1-0.51ohmJ RES RS	324A1012J0518	2	
19	R26, R33, R34, R545, R576, R577, R580, R581, R585	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	9	
20					
21	C506, C507, C513~C516, C518, C526, C527	GRM/UMK/MCH/680CH CAP-Ceramic -C	3033003C0680	9	
22	C503, C504, C508, C511, C520, C523~C525	GRM/ TMK/ MCH/ 104Z 25V CAP-Ceramic -C	3036003Z0104	8	
23	C501, C502	GRM/ TMK/ MCH/ 105Z 10V CAP-Ceramic -C	3036003Z0105	2	
24	C519	CC2012SL1H101J 50V CAP-CC (CP)	303A3007K0101	1	
25	C510, C512	CC2012SL1H102J 50V CAP-CC (CP)	303A3007K0102	2	
26	C509, C529	CK2012F1H104Z 50V CAP-CK (CP)	303A6008Z3104	2	
27					
28	CP2	UVX/SME-16VB-10-0A CAP-Alum -P	3041103C1100	1	
29	CP1	KMG50VB-47M 50V CAP-CE 47µF	304A1164H1470	1	
30					
31	IC8	SN74LS38NS Digital IC-BIP (SO)	700A0550N0038	1	
32	IC5	74HC00FP Digital IC-MOS (SO)	702A1703N0000	1	
33	IC6	74HC244FP Digital IC-MOS (SO)	702A1703N0244	1	
34	IC7	74HC373FP Digital IC-MOS (SO)	702A1703N0373	1	

V7X-PWB (Option Control PWB) C5300/C5100 (41768408-4/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	IC9	TC7S02F Digital IC-MOS (CP)	702A3225N0006	1	
36	IC3, IC15	A3955SLBTR Analog-BIPLIN -B	7201826M0002	2	
37	IC4	PST592D-2 BIPLIN-IC	720A4037M0015	1	
38	IC2	MSM65X512A-GS-2K CPU-MOS (ROM) -F	8530195N0001	1	
39					
40	TR4	2SA1338/2SB1198KT TR-PNP/H -C	6001003N0002	1	
41	TR7	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
42	TR6, TR501	DTC124EKAT146 TR-NPN/H -C	6021035N0004	2	
43	TR3	DTC114EKA NPN-HF-TR (CP)	602A1035N0005	1	
44					
45	MOTOR	B4B-PH-K-S Connector-PC	224A3529P0040	1	
46	SNS0	175487-3 Connector-PCB -	2244005P0030	1	
47	MAIN1	1-175487-3 Connector-PCB -	2244005P0130	1	
48	CL1	B2B-PH-K-S Connector-PC	224A3529P0020	1	
49	SNS1	B6B-PH-K-S Connector-PC	224A3529P0060	1	
50					
51	OSC1	CSTLA10M0T55 OSC-Ceramic	381A1045B0014	1	

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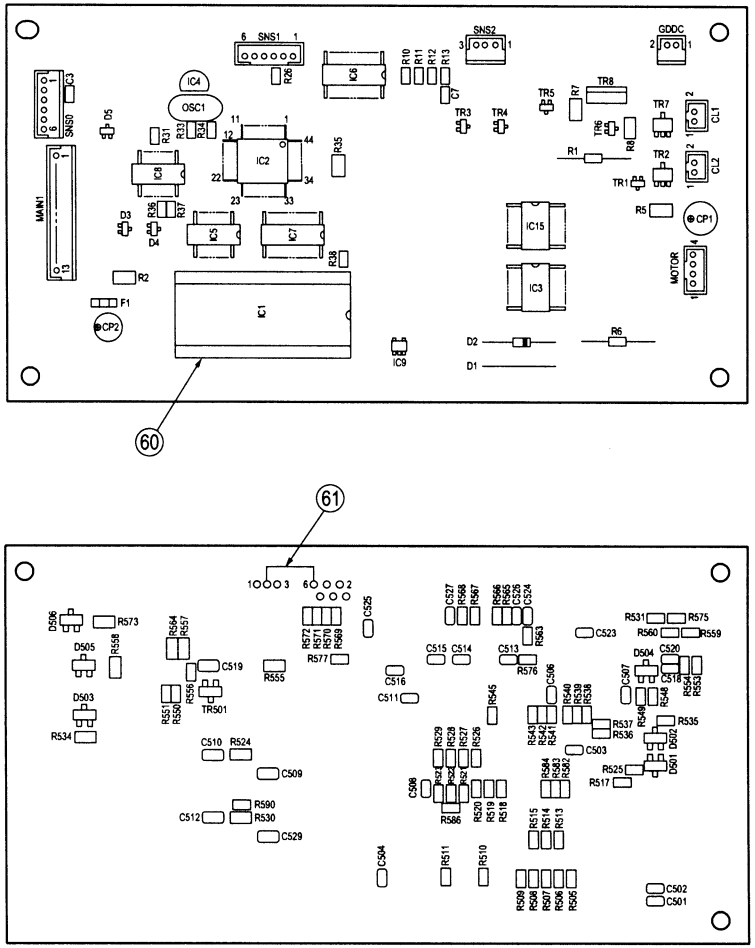
V7X-PWB (Option Control PWB) C5300/C5100 (41768408-5/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52					
53		DICF-28CS-E Socket-IC	245A1221P0280	1	
54					
55	F1	429-002WR Fuse -C	5402205S7202	1	



V7X-PWB (Duplex Control PWB) C5300/C5100
(41768409-1/5)

V7X-PWB (Duplex Control PWB) C5300/C5100
(41768409-2/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D4, D501, D504	SS100MA80VACP D-Signal (CP)	611A0000N0001	3	
2	D3, D5, D502, D503, D505, D506	SS100MA80VKCP D-Signal (CP)	611A0000N0002	6	
3	D1	SHORT WIRE	TA-0.6	1	L=55mm P=15.0mm
4	D2	OR-Rectifying DI -Q	40401401	1	
5					
6	R551	CR/RK73H/ERJ/MCRF133 RES-MET RN -C	3235003F0133	1	
7	R556	CR/RK73H/ERJ/MCRF681 RES-MET RN -C	3235003F0681	1	
8	R550	CR/RK73H/ERJ/MCRF392 RES-MET RN -C	3235003F0392	1	
9	R10~R13, R517, R525, R531, R535, R548, R549, R554, R559, R565, R568	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	14	
10	R38, R511, R519~R523, R526~R529, R536~R543, R569~R571	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	22	
11	R31	CR/RK73K/ERJ/MCRJ222 RES-MET RN -C	3235003J0222	1	
12	R505~R510, R513~R515, R518	CR/RK73K/ERJ/MCRJ330 RES-MET RN -C	3235003J0330	10	
13	R553, R560, R566, R567, R572	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	5	
14	R36, R37, R563, R590	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	4	
15	R5, R7, R534, R557, R564	RM73B2A202J RES RN (CP)	323A5003J0202	5	
16	R555	RM73B2A272J RES RN (CP)	323A5003J0272	1	
17	R524, R530	RM73B2A333J RES RN (CP)	323A5003J0333	2	

V7X-PWB (Duplex Control PWB) C5300/C5100 (41768409-3/5)

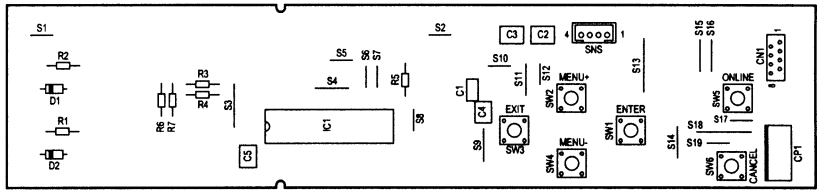
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R8, R558	RM73B2A392J RES RN (CP)	323A5003J0392	2	
19	R2, R35, R573	2125JPW RN RESISTOR (CP)	323A5003P0001	3	
20	R1, R6	RNS1-0.51ohmJ RES RS	324A1012J0518	2	
21	R26, R33, R34, R545, R575~R577, R582~R584, R586	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	11	
22					
23	C3, C7, C506, C507, C513~C516, C518, C526, C527	GRM/UMK/MCH/680CH CAP-Ceramic -C	3033003C0680	11	
24	C503, C504, C508, C511, C520, C523~C525	GRM/ TMK/ MCH/ 104Z 25V CAP-Ceramic -C	3036003Z0104	8	
25	C501, C502	GRM/ TMK/ MCH/ 105Z 10V CAP-Ceramic -C	3036003Z0105	2	
26	C519	CC2012SL1H101J 50V CAP-CC (CP)	303A3007K0101	1	
27	C510, C512	CC2012SL1H102J 50V CAP-CC (CP)	303A3007K0102	2	
28	C509, C529	CK2012F1H104Z 50V CAP-CK (CP)	303A6008Z3104	2	
29					
30	CP2	UVX/SME-16VB-10-0A CAP-Alum -P	3041103C1100	1	
31	CP1	KMG50VB-47M 50V CAP-CE 47μF	304A1164H1470	1	
32					
33	IC8	SN74LS38NS Digital IC-BIP (SO)	700A0550N0038	1	
34	IC5	74HC00FP Digital IC-MOS (SO)	702A1703N0000	1	

V7X-PWB (Duplex Control PWB) C5300/C5100 (41768409-4/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	IC6	74HC244FP Digital IC-MOS (SO)	702A1703N0244	1	
36	IC7	74HC373FP Digital IC-MOS (SO)	702A1703N0373	1	
37	IC9	TC7S02F Digital IC-MOS (CP)	702A3225N0006	1	
38	IC3, IC15	A3955SLBTR Analog-BIPLIN -B	7201826M0002	2	
39	IC4	PST592D-2 BIPLIN-IC	720A4037M0015	1	
40	IC2	MSM65X512A-GS-2K CPU-MOS (ROM) -F	8530195N0001	1	
41					
42	TR4	2SA1338/2SB1198KT TR-PNP/H -C	6001003N0002	1	
43	TR8	2SA1248 PNP-HF-TR	600A1132M0001	1	
44	TR2, TR7	2SB1123 PNP-LF-TR (CP)	601A1032N0002	2	
45	TR1, TR5, TR6, TR501	DTC124EKAT146 TR-NPN/H -C	6021035N0004	4	
46	TR3	DTC114EKA NPN-HF-TR (CP)	602A1035N0005	1	
47					
48	GDDC	175487-2 Connector-PCB	2244005P0020	1	
49	SNS2	175487-3 Connector-PCB	2244005P0030	1	
50	MOTOR	B4B-PH-K-S Connector-PC	224A3529P0040	1	
51	SNS0	175487-6 Connector-PCB -	2244005P0060	1	

V7X-PWB (Duplex Control PWB) C5300/C5100 (41768409-5/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	MAIN1	1-175487-3 Connector-PCB -	2244005P0130	1	
53	CL1	B2B-PH-K-Y Connector-PCB	224A3529P0022	1	
54	CL2	B2B-PH-K-S Connector-PC	224A3529P0020	1	
55	SNS1	B6B-PH-K-S Connector-PC	224A3529P0060	1	
56					
57	OSC1	CSTLA10M0T55 OSC-Ceramic	381A1045B0014	1	
58	F1	429-002WR Fuse -C	5402205S7202	1	
59					
60		DICF-28CS-E Socket-IC	245A1221P0280	1	
61		WIRE	LY-6507-1-GN	1	L=12.0mm



RSP-PWB (Control Panel PWB) C5300/C5100 (41938501-1/3)

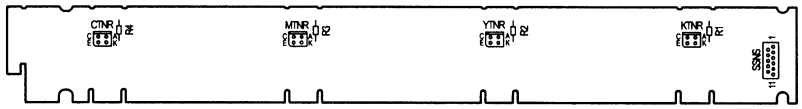
RSP-PWB (Control Panel PWB) C5300/C5100 (41938501-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R7	NAT1/4/RD16S-104J RES -Q	3211003J0104	1	
2	R2~R5	NAT1/4/RD16S-201J RES -Q	3211003J0201	4	
3	R1	NAT1/4/RD16S-301J RES -Q	3211003J0301	1	
4	R6	NAT1/4/RD16S-182J RES -Q	3211003J0182	1	
5					
6	C2~C5	DD104B101K 50V CAP-CK 100pF	302A4011K3101	4	
7	C1	MLRD/FK18/RPEF-104Z CAP-Ceramic -N	3034003Z3104	1	
8	CP1	KME10VB-100 10V CAP-CE 100µF	304A1115A1101	1	
9					
10	IC1	BU6152S Digital IC-MOS	702A4733M0002	1	
11					
12	SW1~SW6	SOR-113HS SW-Pushbutton	205A1165P1000	6	
13					
14	SNS	B4B-PH-K-S Connector-PC	224A3529P0040	1	
15	CN1	08FMN-STK-A Connector-PCB -	2243040P0080	1	
16					
17	D1	SEL6410G Optical ssource -	6500004M0001	1	

Oki Data CONFIDENTIAL

RSP-PWB (Control Panel PWB) C5300/C5100 (41938501-3/3)

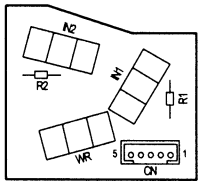
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	D2	SEL6810A Optical ssource -	6500229M0001	1	
19					
20	S1, S2, S5~S8, S10, S12, S17, S19	SHORT WIRE	TA-06	10	L=55mm P=5.0mm
21	S4, S9, S11, S14~S16	SHORT WIRE	TA-06	6	L=55mm P=7.5mm
22	S3	SHORT WIRE	TA-06	1	L=55mm P=10.0mm
23	S13, S18	SHORT WIRE	TA-06	2	L=55mm P=12.5mm



PRD PWB (Toner Low Sensor PWB) C5300/C5100
(41903701-1/2)

PRD PWB (Toner Low Sensor PWB) C5300/C5100
(41903701-2/2)

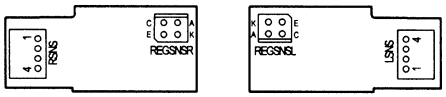
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R1~R4	NAT1/4/RD16S-751J RES-Carbon flm -Q	3211003J0751	4	
2					
3	CTNR, KTNR, MTNR, YTNR	RPR-220 Sensor-optical -	5631001P0002	4	
4					
5	SSNS	11FMN-STK-A Connector-PCB -	2243040P0110	1	



RSF PWB (Entrance Sensor PWB) C5300/C5100
(41938601-1/2)

RSF PWB (Entrance Sensor PWB) C5300/C5100
(41938601-2/2)

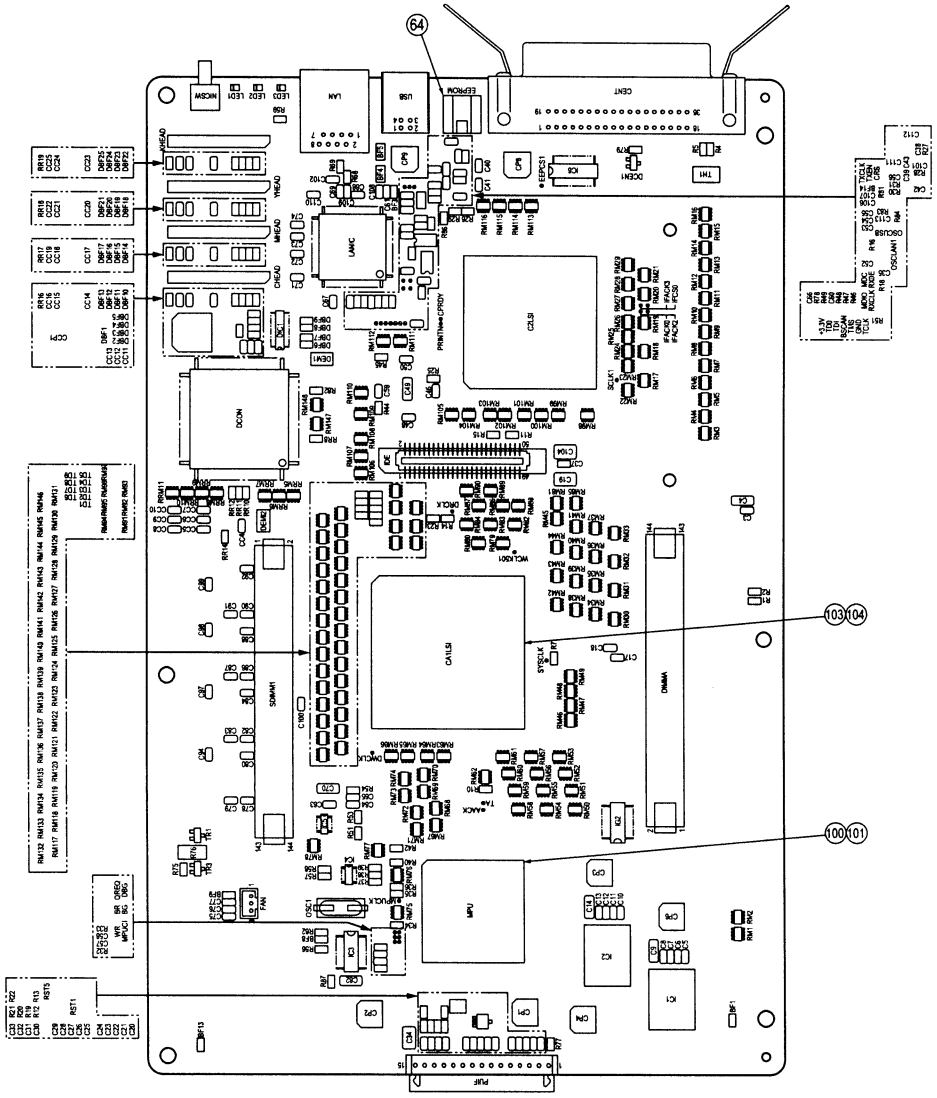
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R1	NAT1/4/RD16S-181J RES-Carbon flm -Q	3211003J0181	1	
2	R2	NAT1/4/RD16S-121J RES-Carbon flm -Q	3211003J0121	1	
3					
4	CN	B5B-PH-K-S Connector-PCB -	224A3529P0050	1	
5					
6	WR, IN1, IN2	RPI-574/SG-206 Photo-Coupler -	652A0103M0002	3	



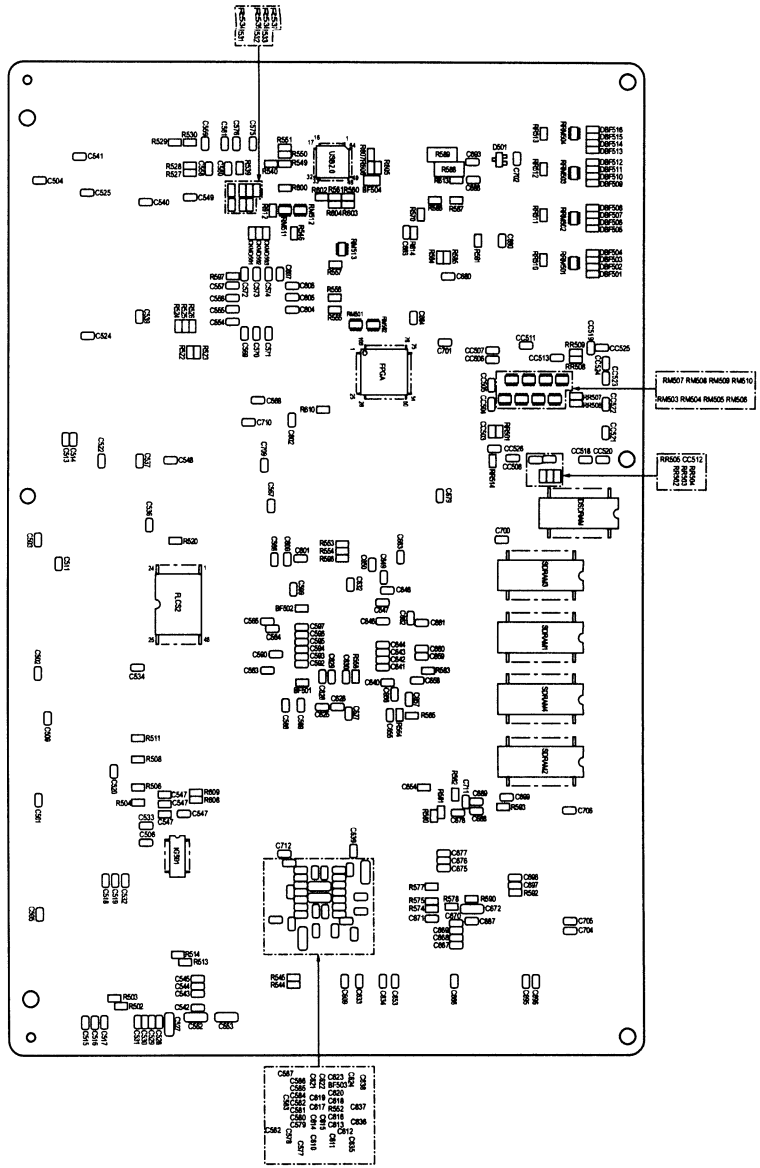
Z71 PCB (Color Registration Sensor PWB)
(41206401-1/2)

Z71 PCB (Color Registration Sensor PWB)
(41206401-2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	REGSNSL, REGSNSR	RPR-220 Sensor-optical -	5631001P0001	2	
2					
3	LSNS, RSNS	S4B-PH-K-S PC Connector	224A3531P0040	2	



OWL-PWB (Main Controller PWB) C5300
(41964401-1/10)



OWL-PWB (Main Controller PWB) C5300
(41964401-2/10)

OWL-PWB (Main Controller PWB) C5300 (41964401-3/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D501, DCEN1	SB05-05CP D-Rectifying -C	610A0332N0001	2	
2	R502, R503, R513	CR/RK73H/ERJ/MCRF202 RES-MET RN -C	3235003F0202	3	
3	R606, R607	CR/RK73H/ERJ/MCRF360 RES-MET RN -C	3235003F0360	2	
4	R68, R69	CR/RK73H/MCR/F54R9 RES-MET RN -C	3235003F5499	2	
5	R588, R589	RK73H/CR/MCR-49R9F RES-MET RN -C	3235103F4999	2	
6	R514	CR/RK73K/ERJ/MCRF911 RES-MET RN -C	3235003F0911	1	
7	R31	CR/RK73K/ERJ/MCRF912 RES-MET RN -C	3235003F0912	1	
8	R570	CR/RK73K/MCR/F9311 RES-MET RN -C	3235003F9311	1	
9	R552, R565, R583, RR505	CR/RK73K/ERJ/MCRJ100 RES-MET RN -C	3235003J0100	4	
10	RR506~RR509	CR/RK73K/ERJ/MCRJ101 RES-MET RN -C	3235003J0101	4	
11	R35, R49, R536, R592	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	4	
12	R34, R537, R555, R558, R593, R597, R609, RR14, RR501, TD1~TD9	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	18	
13	R45	CR/RK73K/ERJ/MCRJ151 RES-MET RN -C	3235003J0151	1	
14	R605	CR/RK73K/ERJ/MCRJ152 RES-MET RN -C	3235003J0152	1	
15	R75	CR/RK73K/ERJ/MCRJ202 RES-MET RN -C	3235003J0202	1	
16	R62	CR/RK73K/ERJ/MCRJ203 RES-MET RN -C	3235003J0203	1	
17	R16, R84, R560, R561	CR/RK73K/ERJ/MCRJ220 RES-MET RN -C	3235003J0220	4	

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OWL-PWB (Main Controller PWB) C5300 (41964401-4/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	RR10~RR12, RR502~RR504	CR/RK73K/ERJ/MCRJ300 RES-MET RN -C	3235003J0300	6	
19	DBF501~DBF516, R7, R13, R19, R20, R37~R39, R44, R53, R56~R58, R517, R523, R527, R528, R531, R539, R545, R546, R553, R554, R564, R581, R582, R596, R612, RR510~RR513	CR/RK73K/ERJ/MCRJ330 RES-MET RN -C	3235003J0330	47	
20	R5, R79, R524, R591	CR/RK73K/ERJ/MCRJ332 RES-MET RN -C	3235003J0332	4	
21	R82, R608	CR/RK73K/ERJ/MCRJ470 RES-MET RN -C	3235003J0470	2	
22	R46~R48	CR/RK73K/ERJ/MCRJ471 RES-MET RN -C	3235003J0471	3	
23	R59, R515, R516, R520, R544, R574, R586	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003J0472	7	
24	R30	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	1	
25	R11, R15, R525, R526	CR/RK73K/ERJ/MCRJ510 RES-MET RN -C	3235003J0510	4	
26	R25, R28, R540, R600, R602~R604	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	7	
27	R22, R556, R557	CR/RK73K/ERJ/MCRJ680 RES-MET RN -C	3235003J0680	3	
28	R76	RM73B2H510J RES-MET RN -C	323A5030J0510	1	
29	CKMD501~CKMD503, R1, R2, R4, R10, R12, R14, R18, R21, R23, R26, R27, R29, R32, R33, R36, R40, R42, R51, R54, R77, R78, R83, R86, R87, R504, R506, R508, R511, R522, R529, R530, R532~R535, R549~R551, R575, R577, R578, R580, R584, R585, R587, R590, R610, R613, R614, RR8, RR16~RR19, RR514	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	58	

OWL-PWB (Main Controller PWB) C5300 (41964401-5/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
30	RM30~RM45, RM62, RM65, RM66, RM85, RM108~RM110, RM132, RM501	MNR14E0ABJ330 RES-Block -C	3345000J0330	25	
31	RM118~RM123, RM134~RM138, RM147, RM148	CN1J/EXB/BCN10ohmJ RES-Block -C	3345003J0100	13	
32	RM1, RM2, RM18, RM19, RM63, RM64, RM67~RM74, RM76, RM77, RM79, RM80, RM82~RM84, RM91, RM93, RM94, RM96, RM102, RM103, RM106, RM107, RM113	CN1J/EXB/BCN10KohmJ RES-Block -C	3345003J0103	30	
33	RM503~RM510	CN1J/EXB/BCN150ohmJ RES-Block -C	3345003J0151	8	
34	RM78, RM117, RM133, RRM5~RRM7	CN1J/EXB/BCN22ohmJ RES-Block -C	3345003J0220	6	
35	RM511~RM513	CN1J/EXB/BCN33ohmJ RES-Block -C	3345003J0330	3	
36	RM4, RM6, RM7, RM9, RM11, RM12, RM17, RM20~RM24, RM26~RM29, RM46~RM61, RM81, RM99, RM124~RM131, RM139~RM146	CN1J/EXB/BCN47ohmJ RES-Block -C	3345003J0470	50	
37	RM25, RM75, RM98, RM100, RM101, RM104, RM111, RM112, RM114~RM116	CN1J/EXB/BCN5.1KohmJ RES-Block -C	3345003J0512	11	
38	RM3, RM5, RM8, RM10, RM13~RM16, RM86~RM90, RM92, RM95, RM97, RM105, RM502, RRM8~RRM11	CN1J/EXB/BCN68ohmJ RES-Block -C	3345003J0680	22	
39	RRM501~RRM504	CN1J/EXB/BCN0ohm RES-Block -C	3345003P0001	4	
40	C23, C28, C506, C569, C574, C609	GRM/UMK/MCH/101CH CAP-Ceramic -C	3033003C0101	6	

OWL-PWB (Main Controller PWB) C5300 (41964401-6/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
41	C3, C5, C10, C24, C29, C33, C37, C77, C501, C505, C517, C531, C532, C537, C539, C545, C564, C565, C570, C572, C581, C588, C590, C592, C597, C614, C627, C628, C630, C633, C634, C647, C650, C654, C655, C657, C661, C668, C671, C698, C701, C706	GRM/UMK/MCH/221CH CAP-Ceramic -C	3033003C0221	42	
42	C101, C576	GRM/UMK/MCH/391CH CAP-Ceramic -C	3033003C0391	2	
43	CC526	GRM/UMK/MCH/680CH CAP-Ceramic -C	3033003C0680	1	
44	C6, C11, C22, C27, C32, C59, C108, C502, C516, C519, C522, C525, C530, C536, C544, C554, C559, C560, C582, C599, C600, C607, C616, C641, C659, C664, C666, C669, C679, C686, C695, C702, C704, CC11	GRM/UMK/MCH/102B 50V CAP-Ceramic -C	3036003K0102	34	
45	C7, C12, C21, C26, C31, C35, C48, C52, C54, C60, C61, C63~C67, C69, C73, C74, C76, C79, C83, C87, C91, C100, C106, C109, C113, C503, C504, C514, C515, C518, C524, C529, C533, C541, C543, C548, C549, C556, C563, C566~C568, C578, C580, C585, C589, C594, C595, C601, C602, C606, C615, C618, C622, C624, C626, C639, C646, C658, C662, C675, C676, C678, C680, C683, C688~C690, C696, C697, C705, C709, C711, CC12, CC16, CC19, CC22, CC25	GRM/UMK/MCH/103B 50V CAP-Ceramic -C	3036003K0103	81	

OWL-PWB (Main Controller PWB) C5300 (41964401-7/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
46	C8, C13, C18, C20, C25, C30, C38~C43, C46, C50, C51, C53, C55~C58, C68, C71, C72, C75, C80, C84, C88, C92, C94, C97~C99, C102, C107, C110~C112, C511, C513, C520, C528, C540, C542, C547, C555, C558, C561, C562, C571, C573, C575, C579, C583, C584, C586, C587, C593, C596, C605, C610~C613, C620, C621, C623, C625, C629, C632, C635~C637, C640, C642~C644, C648, C649, C653, C656, C660, C663, C667, C670, C677, C687, C693, C700, C710, CC4~CC10, CC13~CC15, CC17, CC18, CC20, CC21, CC23, CC24, CC503~CC508, CC511~CC513, CC518~CC525	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	122	
47	C17, C78, C82, C86, C90, C509, C534, C557, C604, C699, C712	GRM/LMK/MCH/105Z 10V CAP-Ceramic -C	3036003Z0105	11	
48	C4, C9, C14, C49, C62, C70, C527, C552, C553, C577, C617, C619, C638, C672	GRM31/CM316-106 10V CAP-Ceramic -B	3036203Z0106	14	
49	C19, C34, C104	CM32Y5V475Z25AT 25V CAP-Ceramic -C	3038001Z2475	3	
50	CP1, CP2, CP4, CP6	MVY16VC/CECBT-101M CAP-Alum (CE) -C	3047003C1101	4	
51	CP3, CP8, CP9	PXA4VC150MF60 4V CAP-Alum (CE) -B	3047001G0151	3	
52	IG2	74LVC04NST/FP Digital IC-MOS -S	7022203N3004	1	
53	IC6	SN74LVC161284DGGR Digital IC-MOS -S	7022350N1284	1	
54	IG501	SN74LV08ANSR Digital IC-MOS -S	7022450N3008	1	

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OWL-PWB (Main Controller PWB) C5300 (41964401-8/10)

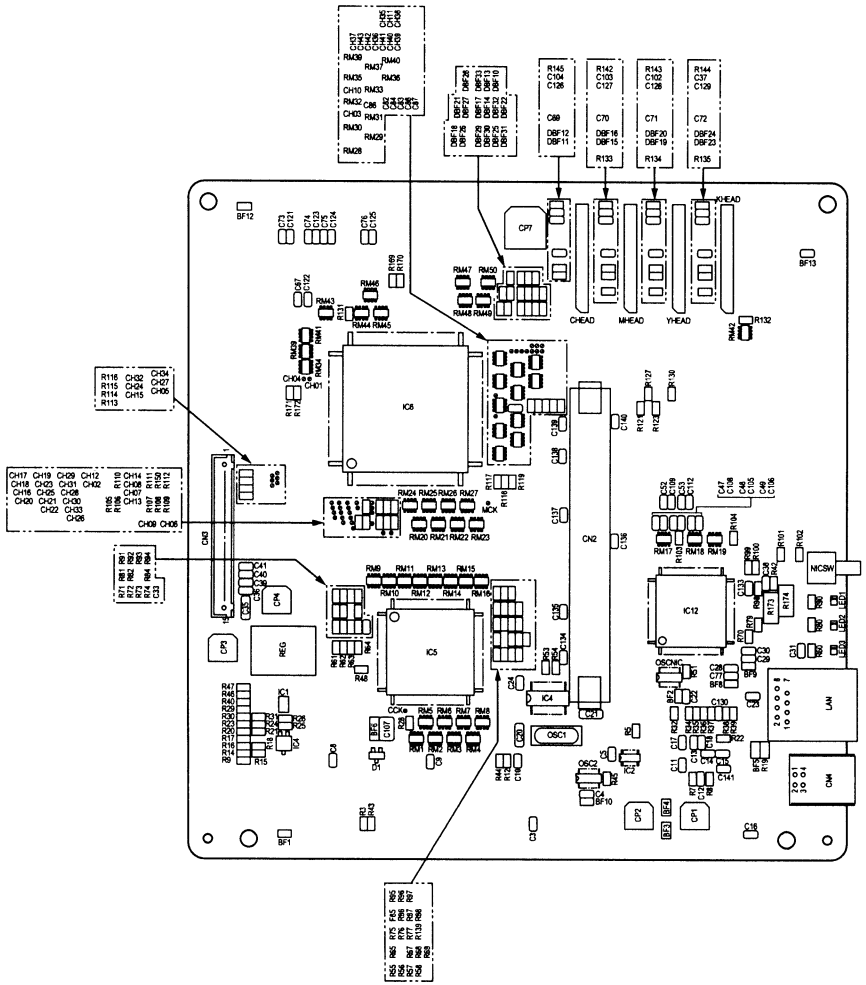
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
55	CA1LSI	UPD85611N7-011-H9 Digital IC-MOS -F	7024923N1171	1	
56	DCON	UPD65454GD-241-LML Digital IC-MOS -F	7024923N1175	1	
57	C2LSI	TC220G64TB-7002 Digital IC-MOS -F	7024925N0013	1	
58	DIC1	DS90LV031ATMX I/F IC-MOS -S	7123053N0004	1	
59	IC1	PQ05VY3H3ZP Analog-BIPLIN -B	7201035N0002	1	
60	IC2	PQ05VY053ZP Analog-BIPLIN -B	7201035N0003	1	
61	RST1	M62733ML-600C Analog-BIPLIN -C	7204022N0002	1	
62	RST5	PST596CNR Analog-BIPLIN -C	7204037N0003	1	
63	DSDRAM	56V16160-10 Memory-MOSDRAM -S	8020003N4616	1	
64		M93C86-WBN6 Memory-MOSEEPR -	8164323M0000	1	
65	FLCS2	PROM-Control-PX714/715	42330501	1	
66	FPGA	LSI2064VE-200LT100 Memory-PLA -F	8181300N0001	1	
67	MPU	IBM25PPC750CXEJP2013 CPU-MOS -F	8510542N0009	1	
68	LANIC	DP83815DVNG CPU-Interface -F	8550053N0002	1	
69	IC5	PI6C2504AQX CPU-Interface -B	8550079N0001	1	
70	IC3	PLL702-01XC-R CPU-Interface -B	8550090N0001	1	
71	IC4	PLL102-05SC-R CPU-Interface -B	8550090N0002	1	

OWL-PWB (Main Controller PWB) C5300 (41964401-9/10)

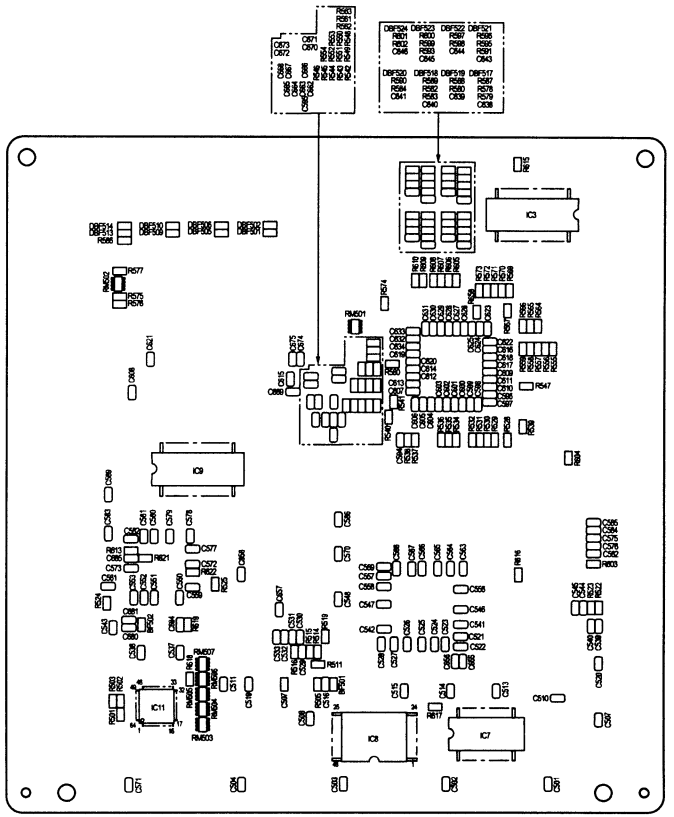
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
72	USB2.0	NET2270 CPU-Interface -F	8550097N0001	1	
73	BF4, BF5	LK21251ROK-T Coil-HF -C	3534101K0109	2	
74	DBF10~DBF25	BLM18AG601SN1D Core- -C	1055002C0001	16	
75	TR3	2SA1338/2SB1198KT TR-PNP/H FREQ -C	6001003N0002	1	
76	TR1	DTC123YK/YKAT146 TR-NPN/H FREQ -C	6021003N0004	1	
77	EEROM	DICF-8CS-E Socket-SEMICON -	245A1221P0080	1	
78	NICSW	SOB-241VS Switch-Push -	2051007P1000	1	
79	CENT	57RE-40360-830B-D29 Connector-SQR -	2201001P0360	1	
80	LAN	RJS1A8T089A Connector-Plug -	2233007P0002	1	
81	USB	DUSB-BRA42-T11 (D2) Connector-PCB -	2243041P0040	1	
82	CHEAD, KHEAD, MHEAD, YHEAD	04 6232 124 008 800 Connector-PCB -B	2243105P0240	4	
83	IDE	8930E-050-178MS-29 Connector-PCB -S	2243106P0500	1	
84	PUIF	15JQ-ST Connector-PCB -	2244100P0150	1	
85	FAN	B3B-PH-K-S Connector-PCB -	224A3529P0030	1	
86	OSC1	HC-49/U03C-14.318MHz OSC-Crystal -C	3801001B0006	1	
87	BF1, BF3, BF8, BF9, BF13, BF14, BF501~BF503	BLM18PG300SN1D Core -C	1055001C0001	9	
88	DEMI1, DEMI2	ACH3218-102-T Core -C	1055013C0001	2	

OWL-PWB (Main Controller PWB) C5300 (41964401-10/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
89	BF504, R81	FB-MJ2125HS420-T Core -C	1055020C0001	2	
90	DBF1~DBF9	MMZ1608Y152BT Filter-PW line -C	3775004P0011	9	
91	TH1	miniSMDC100-02 FUSE -C	5400500L0102	1	
92	LED2, LED3	SEL6410G/ PHOTO-LED -	6500003M0003	2	
93	LED1	SEL6910D/ PHOTO-LED -	6500003M0006	1	
94	SDRAM1~SDRAM4	K4S281632D-TC75 Memory-MOSDRAM -S	8020073N7601	4	
95	DIMMA, SDIMM1	29-6403-144-121-856 Socket-SEMICON -S	2451006P0144	2	
96	CCP1	PXA6.3VC470MJ80 6.3V CAP-Alum (CE) -B	3047001J0471	1	
97	OSCLAN1	K30-3C0-SE25.0000MR OSC-Crystal -C	3846001B0001	1	
98	OSCUSB	FCXO/K30-30.0000MHZ OSC-Crystal -C	3846003C0001	1	
99					
100		16PC26/OSH-1627 Heat sink -	1611003P0001	1	
101		Plate-Tension (A)	41744901	1	
102					
103		OSH-2043-L43.2-T Heat sink -	1611006P0002	1	
104		Plate-Tension (B)	42212401	1	



ARC-PWB (Main Controller PWB) C5100
(41939101-1/8)



ARC-PWB (Main Controller PWB) C5100
(41939101-2/8)

ARC-PWB (Main Controller PWB) C5100 (41939101-3/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D1	SS100MA80VSCP D-Signal -C	611A0000N0003	1	
2	R587, R589, R596, R600	CR/RK73H/ERJ/MCRF151 RES-MET RN -C	3235003F0151	4	
3	R522, R523	CR/RK73H/ERJ/MCRF202 RES-MET RN -C	3235003F0202	2	
4	R579, R580, R583, R584, R591, R593, R598, R602	CR/RK73H/ERJ/MCRF221 RES-MET RN -C	3235003F0221	8	
5	R501, R503	CR/RK73H/ERJ/MCRF360 RES-MET RN -C	3235003F0360	2	
6	R70, R79	CR/RK73H/MCR/F54R9 RES-MET RN -C	3235003F5499	2	
7	R578, R582, R588, R590, R595, R597, R599, R601	CR/RK73H/ERJ/MCRF681 RES-MET RN -C	3235003F0681	8	
8	R22	CR/RK73H/ERJ/MCRF912 RES-MET RN -C	3235003F0912	1	
9	R131, R554, R618	CR/RK73K/ERJ/MCRJ101 RES-MET RN -C	3235003J0101	3	
10	R16, R25, R525	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	3	
11	R8, R14, R15, R21, R24, R31, R573	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	7	
12	R516	CR/RK73K/ERJ/MCRJ123 RES-MET RN -C	3235003J0123	1	
13	R105, R502, R534, R548, R555	CR/RK73K/ERJ/MCRJ152 RES-MET RN -C	3235003J0152	5	
14	R511	CR/RK73K/ERJ/MCRJ203 RES-MET RN -C	3235003J0203	1	
15	R20, R35, R38, R61~R64, R71~R73, R91~R94, R104, R117~R119, R538~R540, R559, R560, R567, R568	CR/RK73K/ERJ/MCRJ220 RES-MET RN -C	3235003J0220	25	
16	R524	CR/RK73H/MCR/F9311 RES-MET RN -C	3235003F9311	1	

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ARC-PWB (Main Controller PWB) C5100 (41939101-4/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
17	R26, R77, R114, R115, R171, R172, R561~R563, R569~R572	CR/RK73K/ERJ/MCRJ330 RES-MET RN -C	3235003J0330	13	
18	R139, R541	CR/RK73K/ERJ/MCRJ331 RES-MET RN -C	3235003J0331	2	
19	R5	CR/RK73K/ERJ/MCRJ332 RES-MET RN -C	3235003J0332	1	
20	DBF27, DBF28, DBF31, DBF33, R45, R51, R99, R100, R103, R106, R107, R109~R112, R132, R150, R532, R547, R553, R575~R577	CR/RK73K/ERJ/MCRJ470 RES-MET RN -C	3235003J0470	23	
21	R60, R80, R90	CR/RK73K/ERJ/MCRJ471 RES-MET RN -C	3235003J0471	3	
22	R102, R514, R515	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003J0472	3	
23	R39	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	1	
24	R542~R546, R549, R551, R552	CR/RK73K/ERJ/MCRJ510 RES-MET RN -C	3235003J0510	8	
25	R7, R32, R34, R36, R37, R43, R44, R48, R55~R57, R65, R68, R69, R74, R76, R81, R84~R87, R95, R96, R101, R528, R537, R550, R556~R558, R564, R574, R613, R615, R616	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	35	
26	DBF10, DBF14, DBF18, DBF22, R54, R108, R133~R135, R565, R566, R586	CR/RK73K/ERJ/MCRJ680 RES-MET RN -C	3235003J0680	12	
27	R173, R174	RK73H/CR/MCR-49R9F RES-MET RN -C	3235103F4999	2	

ARC-PWB (Main Controller PWB) C5100 (41939101-5/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
28	DBF13, DBF17, DBF21, DBF25, DBF26, DBF29, DBF30, DBF32, R3, R9, R12, R17, R18, R23, R28~R30, R40, R42, R46, R47, R53, R58, R67, R75, R82, R88, R97, R98, R113, R116, R121, R123, R127, R130, R142~R145, R169, R170, R505, R507, R519, R529~R531, R535, R536, R603~R610, R617, R619, R621, R622	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	61	
29	RM503~RM507	CN1J/EXB/BCN100ohmJ RES-Block -C	3345003J0101	5	
30	RM44~RM46	CN1J/EXB/BCN22ohmJ RES-Block -C	3345003J0220	3	
31	RM1~RM27, RM34, RM37~RM39, RM41~RM43, RM501, RM502	CN1J/EXB/BCN47ohmJ RES-Block -C	3345003J0470	36	
32	RM33, RM35, RM36, RM40	CN1J/EXB/BCN5.1KohmJ RES-Block -C	3345003J0512	4	
33	RM28~RM32, RM47~RM50	CN1J/EXB/BCN68ohmJ RES-Block -C	3345003J0680	9	
34					
35	C82~C84, C86~C88, C662~C675	GRM/UMK/MCH/100CH CAP-Ceramic -C	3033003C0100	20	
36	C584, C638~C641, C643~C646	GRM/UMK/MCH/101CH CAP-Ceramic -C	3033003C0101	9	
37	C41, C502, C507, C508, C510, C519, C532, C538, C543, C548, C571, C585, C608	GRM/UMK/MCH/221CH CAP-Ceramic -C	3033003C0221	13	
38	C9, C33, C130, C133, C594	GRM/UMK/MCH/391CH CAP-Ceramic -C	3033003C0391	5	

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ARC-PWB (Main Controller PWB) C5100 (41939101-6/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
39	BF13, C16, C28, C30, C31, C38, C40, C121~C125, C503, C511, C514, C533, C570, C575, C583, C595, C598, C599, C601, C603~C606, C609~C612, C614, C617~C620, C623~C627, C630, C631, C634, C681	GRM/UMK/MCH/102B 50V CAP-Ceramic -C	3036003K0102	45	
40	C4, C22, C37, C39, C47~C49, C52, C53, C102~C106, C108, C109, C112, C126~C129, C134, C135, C137~C140, C501, C504, C513, C515, C520, C537, C576, C586, C589, C615, C621, C656, C684	GRM/UMK/MCH/103B 50V CAP-Ceramic -C	3036003K0103	40	
41	C3, C5, C8, C10~C15, C17, C18, C23, C24, C29, C36, C67, C69~C77, C136, C141, C516, C521~C531, C539~C542, C544~C547, C550~C553, C556~C559, C561~C569, C572, C573, C577~C582, C596, C597, C600, C602, C607, C613, C616, C622, C628, C629, C632, C633, C655, C658, C680, C685	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	88	
42	C657	GRM/LMK/MCH/105Z 10V CAP-Ceramic -C	3036003Z0105	1	
43	C20, C21, C35	GRM31/CM316-106 10V CAP-Ceramic -B	3036203Z0106	3	
44	C107	CM32Y5V475Z25AT 25V CAP-Ceramic -C	3038001Z2475	1	
45	CP1, CP2	MVY16VC220MF80 16V CAP-Alum (CE) -B	3047000C1221	2	
46	CP7	PXA6.3VC470MJ80 6.3V CAP-Alum (CE) -B	3047001J0471	1	
47	CP3, CP4	MVY16VC/CECBT-101M CAP-Alum (CE) -C	3047003C1101	2	
48	REG	PQ05VY3H3ZP Analog-BIPLIN -B	7201035N0002	1	

ARC-PWB (Main Controller PWB) C5100 (41939101-7/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
49	IC14	M62733ML-600C Analog-BIPLIN -C	7204022N0002	1	
50	IC3	56V16160-10 Memory-MOSDRAM -S	8020003N4616	1	
51	IC7	MR27V1602F-1C8TP Memory-MOSEPRO -S	8154628N0001	1	
52	IC8	PROM-Control-PX714	42330502	1	
53	IC12	DP83815DVNG CPU-Interface -F	8550053N0002	1	
54	IC4	PLL702-01XC-R CPU-Interface -B	8550090N0001	1	
55	IC11	NET2270 CPU-Interface -F	8550097N0001	1	
56	BF3, BF4	LK21251ROK-T Coil-HF -C	3534101K0109	2	
57	NICSW	SOB-241VS Switch-Push -	2051007P1000	1	
58	LAN	RJS1A8T089A Connector-Plug -	2233007P0002	1	
59	CN4	DUSB-BRA42-T11 (D2) Connector-PCB -	2243041P0040	1	
60	CHEAD, KHEAD, MHEAD, YHEAD	04 6232 124 008 800 Connector-PCB -B	2243105P0240	4	
61	CN3	B15B-XH-A Connector-PCB -	2243501P0150	1	
62	OSCNIC	K30-3C0-SE25.0000MR OSC-Crystal -C	3846001B0001	1	
63	OSC1	HC-49/U03C-14.318MHz OSC-Crystal -C	3801001B0006	1	
64	BF1, BF2, BF8~BF10, BF12, BF501, BF502, DBF517~DBF524	BLM18PG300SN1D Core- -C	1055001C0001	16	

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ARC-PWB (Main Controller PWB) C5100 (41939101-8/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
65	DBF11, DBF12, DBF15, DBF16, DBF19, DBF20, DBF23, DBF24, DBF501, DBF502, DBF505, DBF506, DBF509, DBF510, DBF513, DBF514	BLM18AG601SN1D Core- -C	1055002C0001	16	
66	BF6	BLM31AF700SN1L Core- -C	1055004C0002	1	
67	BF5, R19	FB-MJ2125HS420-T Core- -C	1055020C0001	2	
68	LED2, LED3	SEL6410G/ PHOTO-LED -	6500003M0003	2	
69	LED1	SEL6910D/ PHOTO-LED -	6500003M0006	1	
70	IC5	PowerPC405PS-200MHz CPU-MOS -F	8510442N0001	1	
71	IC9	OR-Memory-MOSDRAM-S	42392101	1	
72	SDIMMS	29-6403-144-121-856 Socket-SEMICON-S	2451006P0144	1	
73	IC6	MHM2037-001 (ARBOKS) Digital IC-MOS-F	7024975N0001	1	
74	IC2	M24C32-WMN6T Memory-MOSEEPR-B	8165322N0000	1	
75	IC1	TC7SH08FU Digital IC-MOS-C	702A3225N0042	1	
76	OSC2	FCX0/K30-30.0000MHZ OSC-Crystal -C	3846003C0001	1	

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C5100
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Spare Parts List

[Extracted from C5100 Maintenance Manual]

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PARTS LIST

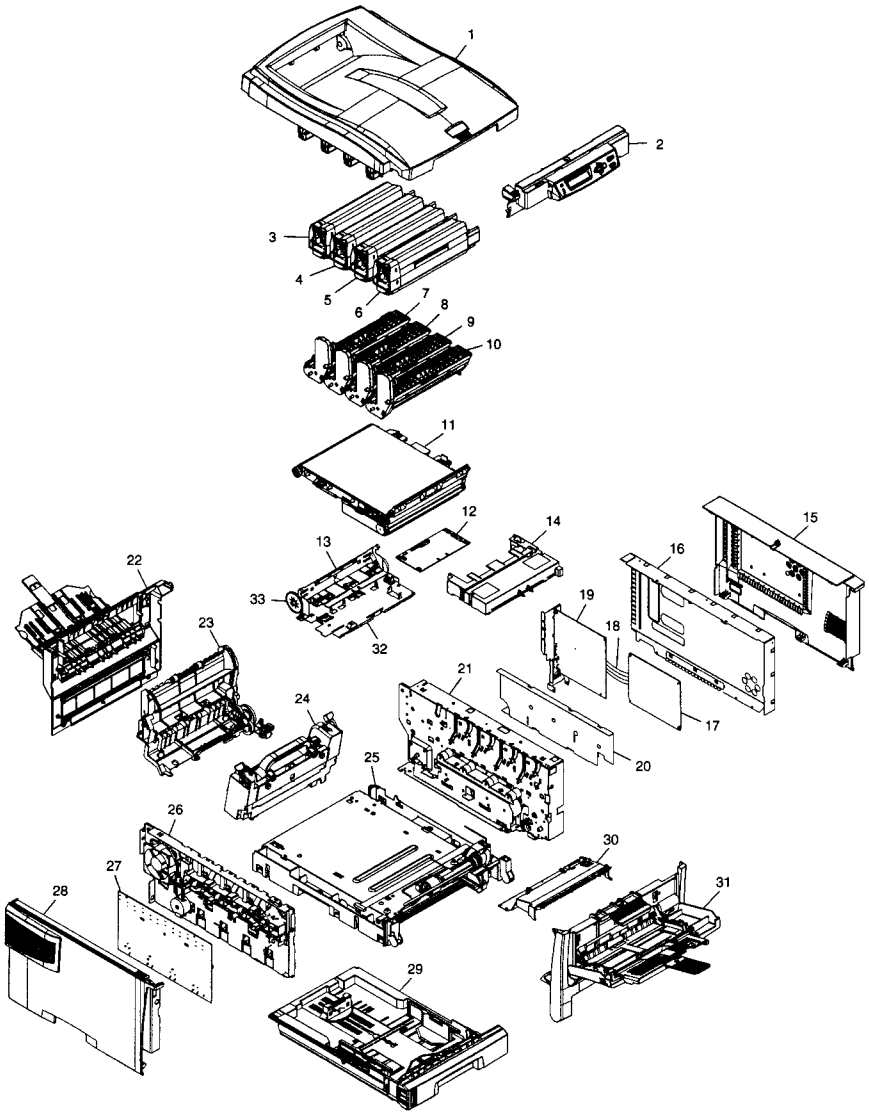

Figure 7-1 Parts Layout

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Table 7-1

Part_Layout

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42074501	Top Cover Assy	1				
2	42067501	Control Panel Assy	1				
3	42127415	Toner-C	1	-	-	-	
4	42127414	Toner-M	1	-	-	-	
5	72127413	Toner-Y	1	-	-	-	
6	42127416	Toner-K	1	-	-	-	
7	42126615	ID-C	1	-	-	-	
8	42126614	ID-M	1	-	-	-	
9	42126613	ID-Y	1	-	-	-	
10	42126616	ID-K	1	-	-	-	
11	42158704	Belt-Unit	1	-	-	-	
12	42135601	Board-RSM	1	2	4	8	
13	42065101	Sensor-Assy-Color-Regist	1				
14	42066901	Cover-Driver	1	1	2	4	
15	42079601	Cover-Assy-SideR	1	1	2	4	
16	42294101	Plate-Assy-Shield (GDI)	1	1	2	4	
17	42135501	Print Engine Controller PWB	1	2	4	8	
18	42141601	CONN Cord	1	2	4	8	
19	42373501	Controler Board CU (GDI)	1	3	6	12	
20	42078701	Film-Insulation	1	1	2	4	
21	42053501	Plate-Assy-Side-R	1				
22	42077501	Cover Assy-Rear	1				
23	42063001	Eject-Assy	1				
24	42158605	Fuser-Unit	1				
25	42049501	Base-Assy	1				
26	42060001	Plate-Assy-Side-L	1				
27	41978801	Power Unit High Voltage	1	2	4	8	
28	42465401	Cover-SideL	1				
29	42087001	Cassette Assy	1	1	2	4	
30	42061501	Cover Assy-Hopping	1				
31	42069001	Feeder-Unit	1				
32	42062101	Plate-Driver	1	1	2	4	
33	42062401	Gear-Idle-Belt	1	2	4	8	

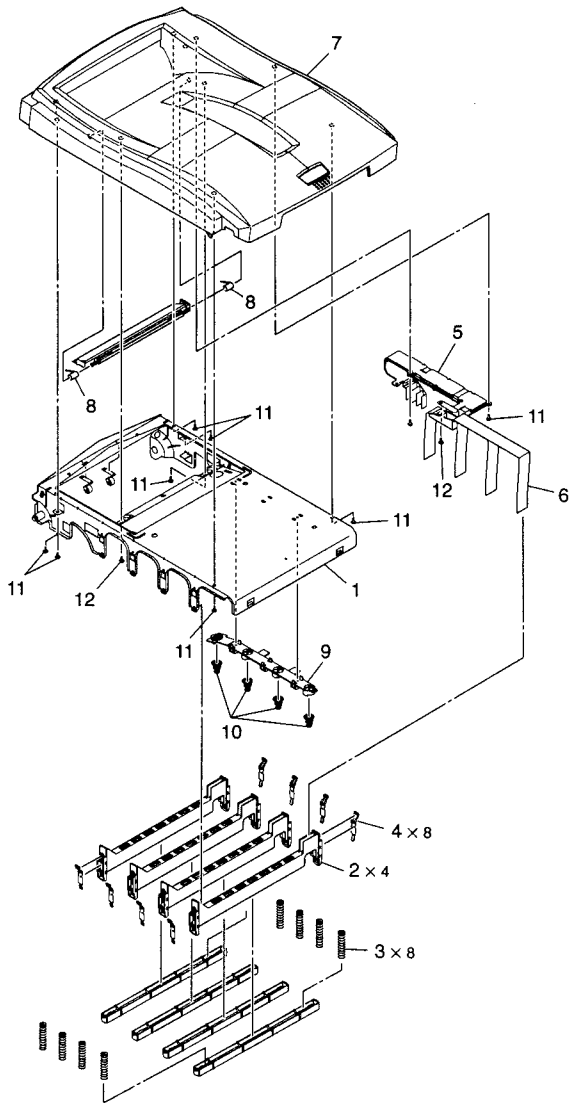

Figure 7-2 Top_Cover_Assy

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Table 7-2

Top_Cover_Assy

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42074601	Plate-Inner (Caulking)	1	1	2	4	
2	42075001	Holder-Head	4	1	2	4	
3	42075101	Spring-Head	8	1	2	4	
4	42075301	Plate-FG-Head	8	1	2	4	
5	42075501	Cable-Assy-Head	1				
6	42076201	Cover-Cable	1	1	2	4	
7	42076301	Cover-Assy-Top (Sub)	1				
8	42076601	Roller Assy-Idle (FD)	2	2	4	8	
9	42373601	Holder-SP (Inner)	1				
10	42392501	Spring-Compression (ID)	4	1	2	4	
11	4PB4083-2500P008	Tapping Screw B2	8	-	-	-	
12	4PB4013-3100P006	Cup Screw A	1	-	-	-	

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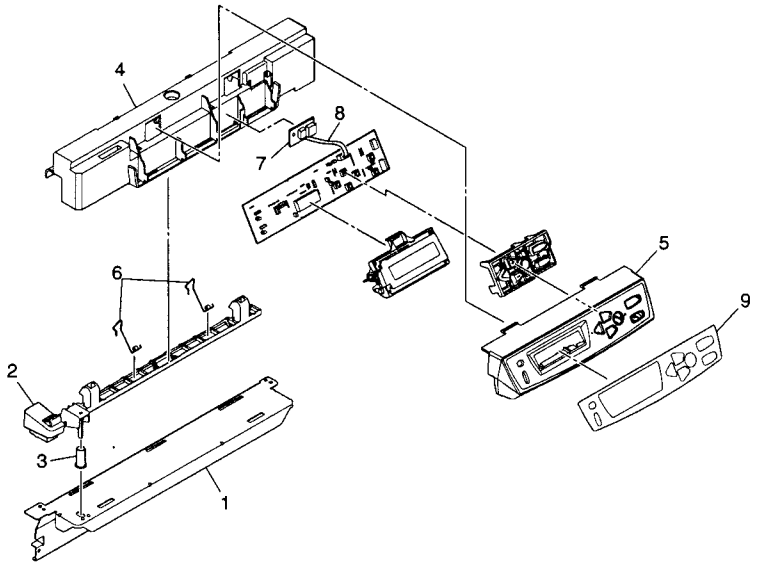

Figure 7-3 Frame_Assy-OP

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Table 7-3

Frame_Assy-OP

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42067601	Plate-Front	1	1	2	4	
2	42067701	Lever-Lock (Top)	1	1	2	4	
3	42067801	Spring-Compression (Lock)	1	1	2	4	
4	42067901	Frame-OP panel	1	1	2	4	
5	42068001	Cover-Assy -OP	1	2	4	8	
6	42293201	Spring-Torsion (FG)	2	1	2	4	
7							
8							
9							

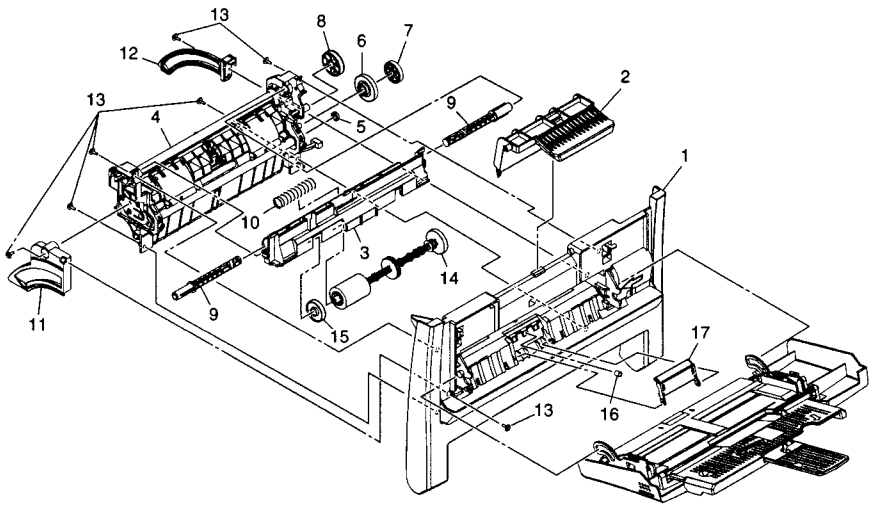

Figure 7-4 MPT_Base_Assy

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Table 7-4

MPT_Base_Assy

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42069201	Cover Assy-Front	1	1	2	4	
2	42069601	Lever-Release-F	1	1	2	4	
3	42070001	Guide-Assy-Top	1				
4	42070501	Feeder-Assy-Resist	1	2	4	8	
5	42072201	Gear-Pressure	1	2	4	8	
6	42072401	Gear-Regist-L (24-54)	1	2	4	8	
7	42057601	Gear-Z42	1	2	4	8	
8	42072501	Gear-Idle-MPT (26-50)	1	2	4	8	
9	42072701	Post-Slide	2	1	2	4	
10	42072801	Spring-Release-F	2	1	2	4	
11	42074001	Stay-Front-L	1	1	2	4	
12	42074101	Stay-Front-R	1	1	2	4	
13	4PB4083-2500P008	Tapping Screw B2	7	-	-	-	
14							
15							
16		Spring	1				
17		Frame Separator	1				

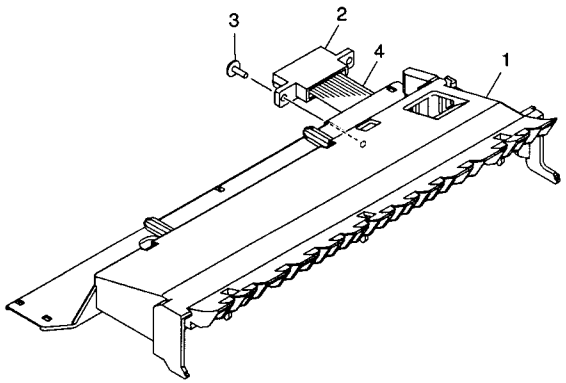

Figure 7-5 Cover_Assy-Hopping

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Table 7-5

Cover_Assy-Hopping

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1			1				
2			1				
3			1				
4			1				

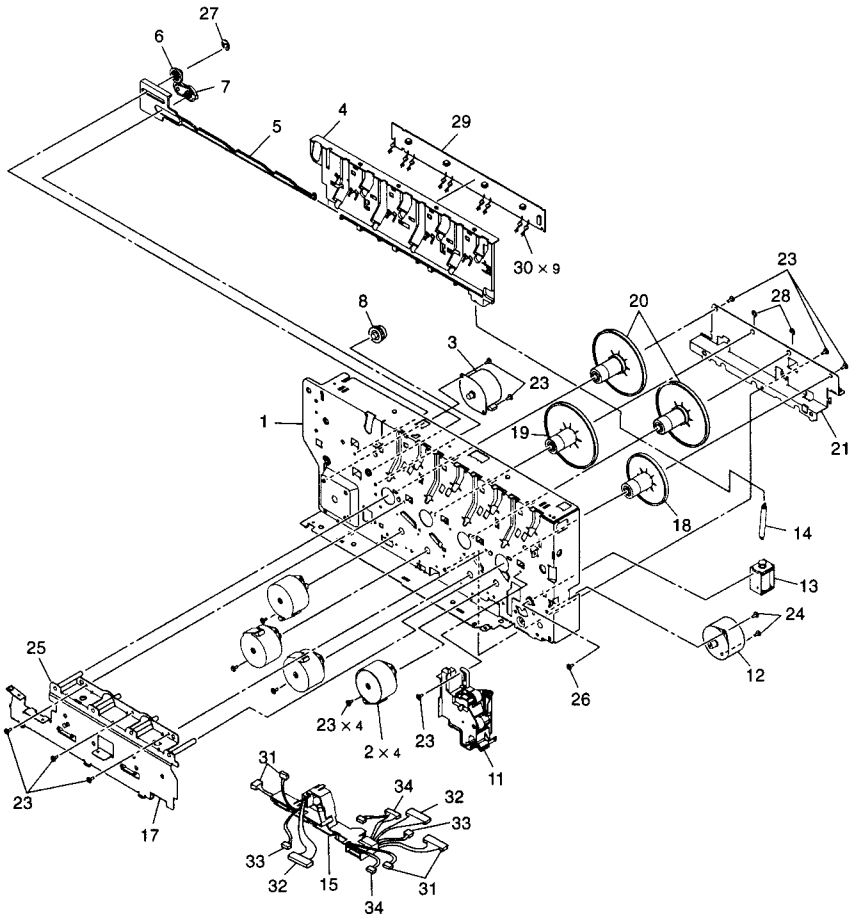

Figure 7-6 Plate_Assy-Side_R

Table 7-6

Plate_Assy-Side_R

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42053801	Plate-Side-R (Caulking)	1	1	2	4	
2	42054501	Motor-Pulse-ID (K)	4	2	4	8	
3	42054801	Motor-Pulse-Fuser	1	2	4	8	
4	42054901	Guide Assy-Side-R	1				
5	42055501	Link-Liftup-R	1	2	4	8	
6	42055701	Gear-Planet	1	2	4	8	
7	42055901	Gear Assy-Planet-R	1	2	4	8	
8	42057101	Gear-Idle-Liftup	1	2	4	8	
9							
10							
11	42057301	Gear Assy-HP	1	2	4	8	
12	42058201	Motor-Resist	1	2	4	8	
13	42058301	Solenoid	1	2	4	8	
14	42058401	Spring-Solenoid	1	1	2	4	
15	42058501	Guide-Cable-F	1				
16							
17	42058601	Bracket-Inner (Caulking)	1	1	2	4	
18	42059001	Gear-Idle-Drum-K	1	2	4	8	
19	42059101	Gear-Idle-Drum-M	1	2	4	8	
20	42059201	Gear-Idle-Drum-YC	2	2	4	8	
21	42059301	Bracket-Outer	1	1	2	4	
22							
23	4PB4013-3100P006	Cup Screw A	13	-	-	-	
24	4PB4083-2500P008	Tapping Screw B2	4	-	-	-	
25	42437301	Plate-Lockout-ID	1				
26	PSW3-4C	Screw	1	-	-	-	
27	RE3-SK	Ring	1	-	-	-	
28	RE4-SK	Ring	2	-	-	-	
29	42135701	Board-PRD	1	2	4	8	
30	42055201	Spring-Contact-TL	9	1	2	4	
31	42141401	CONN Cord-JST12P-JST4PX3	1	2	4	8	
32	42141501	CONN Cord-JST26P-JST26P	1	2	4	8	
33	42303501	CONN Cord-JST2P-JST2P	1	2	4	8	
34	42141301	CONN Cord-JST8P-JST4PX2	1	2	4	8	

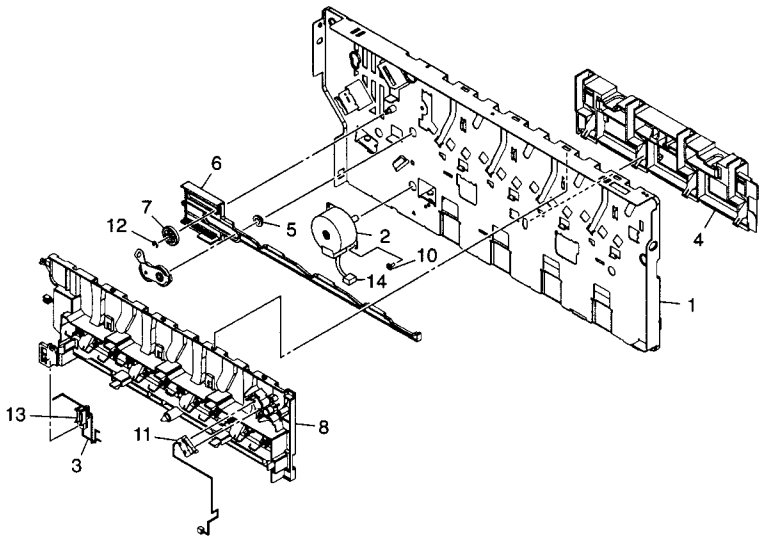

Figure 7-7 Plate_Assy-Side_L

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Table 7-7

Plate_Assy-Side_L

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42060101	Plate-Side-L (Caulking)	1	1	2	4	
2	42054601	Motor-Pulse-ID-Belt	1	2	4	8	
3	42141701	CONN Cord-JST4P-JST4P	1	2	4	8	
4	42060401	Contact-Assy	1	2	4	8	
5	42060701	Bush	1	1	2	4	
6	42060801	Link-Liftup-L	1	2	4	8	
7	42055701	Gear-Planet	1	2	4	8	
8	42060901	Guide Assy-Side-L	1	2	4	8	
9							
10	4PB4013-3100P006	Cup Screw A	1	-	-	-	
11	42025701	Micro switch-Assy	1	2	4	8	
12	RE3-SK	Ring	1	-	-	-	
13							
14	421417-1	CONN	1				

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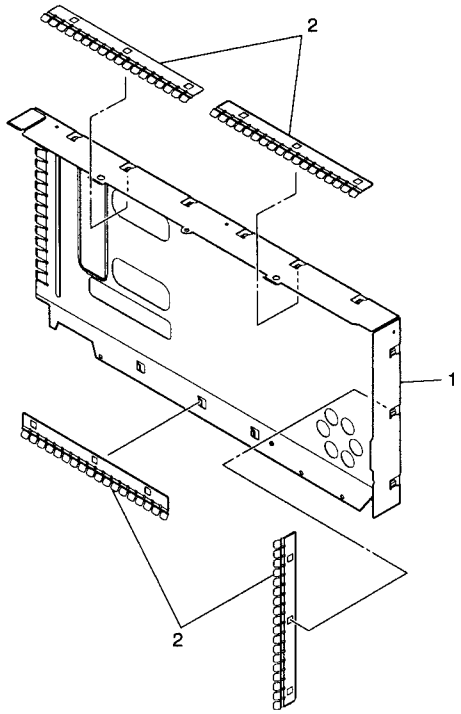

Figure 7-8 Plate_Assy-Shield

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Table 7-8

Plate_Assy-Shield

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42135101	Plate-Side (GDI)	1				
2	42079301	Plate_Contact-Shield	4	-	-		

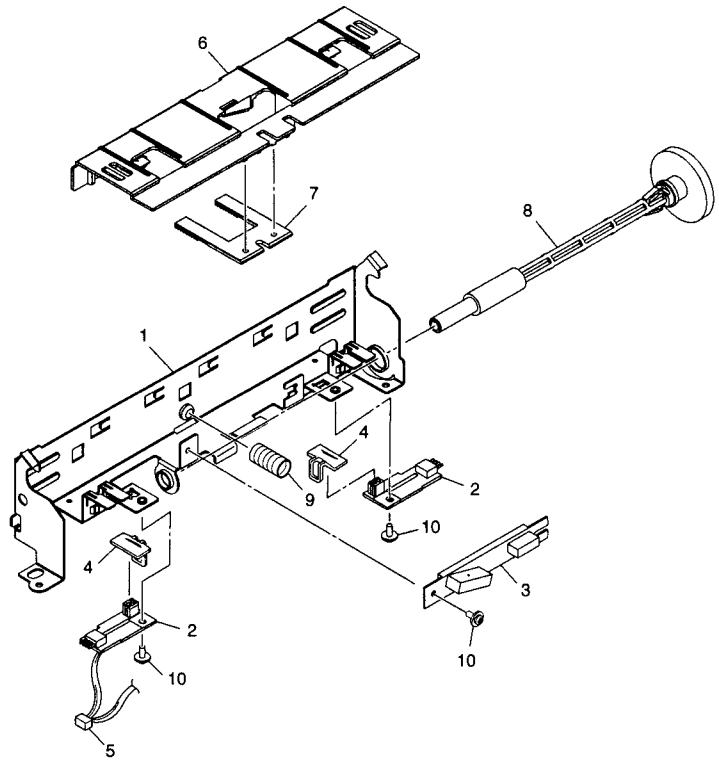

Figure 7-9 Sensor_Assy-Regist

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Table 7-9

Sensor_Assy-Color_Resist

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42065201	Plate-Sensor-C Resist	1	1	2	4	
2	41258601	Board-Z71	2	3	6	12	
3	5654200P0001	GP2TCS SENSOR-Dencity	1	3	6	12	
4	42220901	Plate_Guard-sensor	2	1	2	4	
5	42141801	CONN Cord-JST14P MOLEX5PJST4PX2	1	2	4	8	
6	42065301	Cover-C.Resist (Adhesive)	1	1	2	4	
7	42065701	Gear-Cover-Sensor (Rack)	1	2	4	8	
8	42065801	Shaft-Cover-Sensor	1	2	4	8	
9	42065901	Spring-Cover-Sensor	1	1	2	4	
10	4PB4013-3100P006	Cup Screw A	3	-	-	-	

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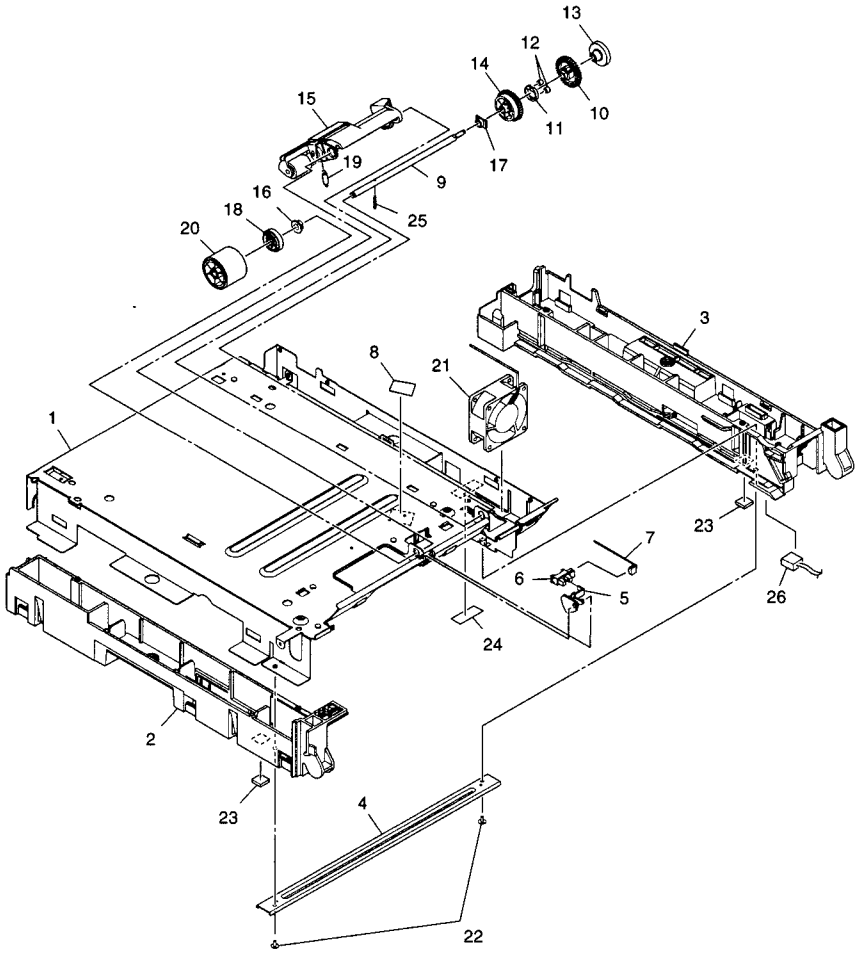

Figure 7-10 Plate_Assy-Base

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Table 7-10

Plate_Assy-Base

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42049601	Plate-Base	1	1	2	4	
2	42049701	Guide Assy-Cassette-L	1	1	2	4	
3	42050101	Guide Assy-Cassette-R	1	1	2	4	
4	42050301	Plate-Beam	1	1	2	4	
5	42050401	Lever-End	1	1	2	4	
6	40135301	Photo-Interrupter	1	2	4	8	SNS-END
7	42141101	CONN Cord-AMP3P-AMP3P	1	2	4	8	Code4(Cable-P-END)
8	4YC4061-1026P001		1				L=30mm
9	42050701	Shaft-Hopping	1	1	2	4	
10	42050801	Stopper-HP	1	2	4	8	
11	42050901	Holder-Planet-HP	1	2	4	8	
12	42051001	Gear-Planet (Z12)-HP	2	2	4	8	
13	42051101	Gear-Z24-50-HP	1	2	4	8	
14	42051201	Stopper-Z45-48-HP	1	2	4	8	
15	42051401	Bracket-Assy-Sub	1	2	4	8	
16	41513401	Bearing-Metal	1	1	2	4	
17	4PP4083-6022P002	BEARING A	1	1	2	4	
18	42052301	Gear-Hopping (Z38)-HP	1	2	4	8	
19	42052501	Spring-Sub	1	1	2	4	
20	42052601	Roller Assy-Hopping	1	3	6	12	
21	42368501	Motor-Fan (60)PowL	1				
22	4PB4013-3100P006	Cup Screw A	2				
23	42423301	Plate-Patch	2				
24	42104603	Tape AL Film	1				L=35mm
25	NK2-16SUS	Pin	1	-	-	-	
26	2233013P01	Connector (9715B-10Z02)	1	2	4	8	

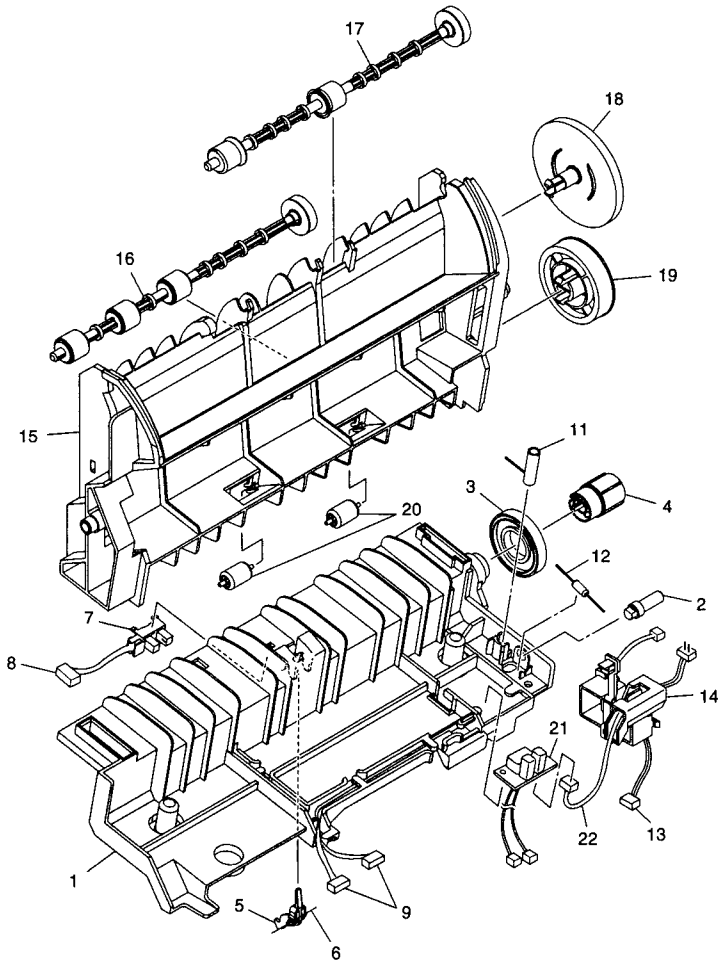

Figure 7-11 Eject_Assy

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Table 7-11

Guide_Assy-Eject-L

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42063201	Guide-Eject-Lower	1	2	4	8	
2	42278501	Post-Gear-Idle-Heat	1	1	2	4	
3	42063801	Gear-Idle-Exit (Z33)	1	2	4	8	
4	42221001	Post-G.E.L.-Z33	1	1	2	4	
5	42063301	Lever-Eject-Sensor	1	2	4	8	
6	40386501	Spring-SNS (F/R)	1	1	2	4	
7	40135301	Photo-Interrupter	1	1	2	4	
8	42141101	CONN Cord-AMP3P-AMP3P	1	2	4	8	
9	42142001	CONN Cord-AMP4P-AMP4P	1	2	4	8	
10	42142101	CONN Cord-AMP2P-JST3P	1	2	4	8	
11	42063601	Spring-FG	1	1	2	4	
12	3263124K0107	GS1/2A100MWK-T52 RES-MET solid - Q	1	1	2	4	
13	42141702	CONN Cord-JST4P-JST4P	1				
14	42059401	Guide-Cable-R	1				
15	42064401	Guide-Eject-Upper	1				
16	42308001	Shaft Assy-Eject (FU)	1	1	2	4	
17	42308101	Shaft Assy-Eject (FD)	1	1	2	4	
18	42064501	Gear-Idle-Exit (Z58)	1				
19	42064701	Gear-Idle-Exit (Z41)	1				
20	42278301	Roller-Sub-G.E.U.	2				
21							
22							

42049001TH Rev.0.5

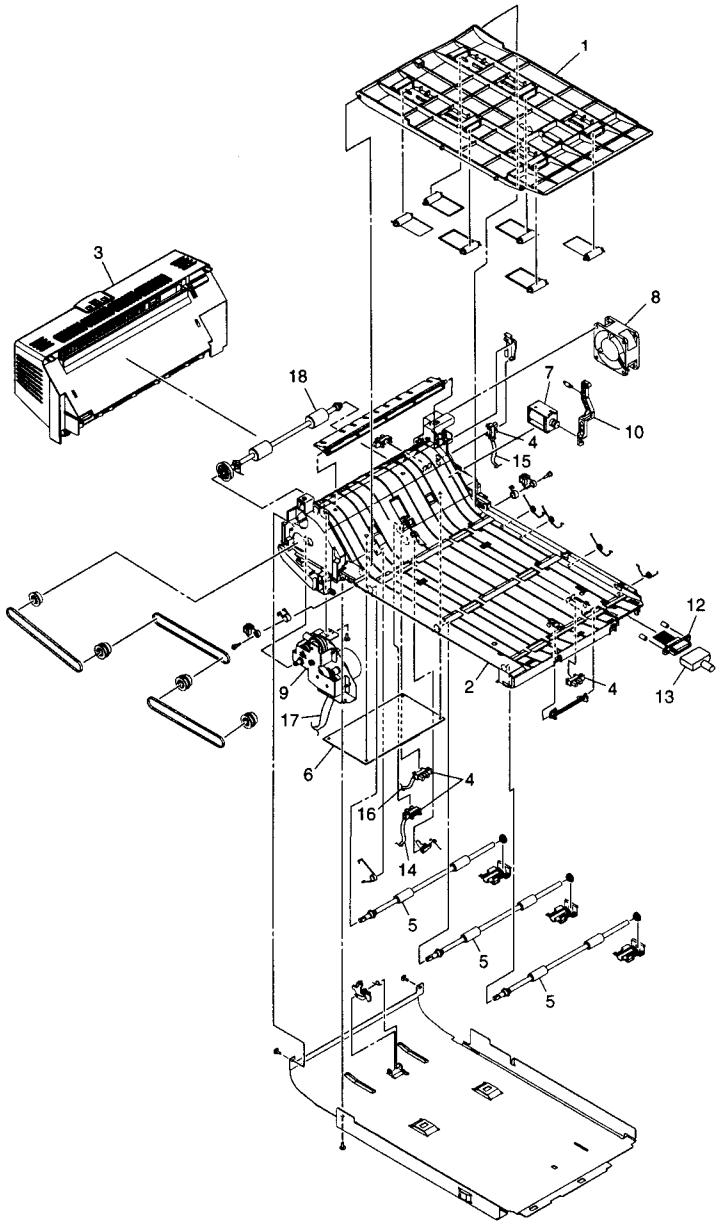

Figure 7-12 Duplex Unit

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Table 7-12

Duplex Unit

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42160301	Frame-Assy-Upper	1	1	2	4	
2	42160401	Frame-Assy-Lower	1	1	2	4	
3	42160501	Frame-Assy-Rear	1	1	2	4	
4	40135301	Photo-Interrupter	5	1	2	4	
5	42194801	Roller-Feed (H)	3	1	2	4	
6	41780309	Board-V7X	1	2	4	8	
7	42058302	Solenoid	1	1	2	4	
8	42396201	Motor-Fan	1	1	2	4	
9	42160601	Gear-Assy	1	1	2	4	
10	42162001	Gear-Assy-Clutch	1	2	4	8	
11	42058201	Motor-Regist	1	1	2	4	
12	2233014P0110	Connector-Plug	1	1	2	4	
13	42142601	Connection-Cord	1	1	2	4	
14	42142801	Connection-Cord	1	1	2	4	
15	42142701	Connection-Cord	1	1	2	4	
16	42141104	Connection-Cord	1	1	2	4	
17	42141705	Connection-Cord	1	1	2	4	
18	42194701	Roller-Feed (Rv)	1	1	2	4	

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C5100
Color LED Page Printer
MAINTENANCE MANUAL

ODA/OEL/INT

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		No.	Page	Description of change	
0.5	2002-12-26			ISSUE	NC1 Maekawa

PREFACE

This manual describes the procedures of the maintenance of the C5300/C5100 printers.

The document is produced for maintenance personnel use. For details on the procedures for handling the C5300/C5100 of printers, see its user documentation.

Note!
- The descriptions in this manual are subject to change without prior notice.
- In preparing the document, efforts have been made to ensure that the information in it is accurate. However, errors may be crept into the document. Oki Data assumes no responsibility for any damage resulting from, or claimed to be the results of, those repairs, adjustments or modifications to the printers which are made by users using the manual.
- The parts used for the printers are sensitive and, if handled improperly, may be damaged. It is strongly recommended that the products are maintained by maintenance men registered with Oki Data.

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1. SPECIFICATIONS

1.1 System Configuration

Figure 1-1 shows the system configuration of C5100.

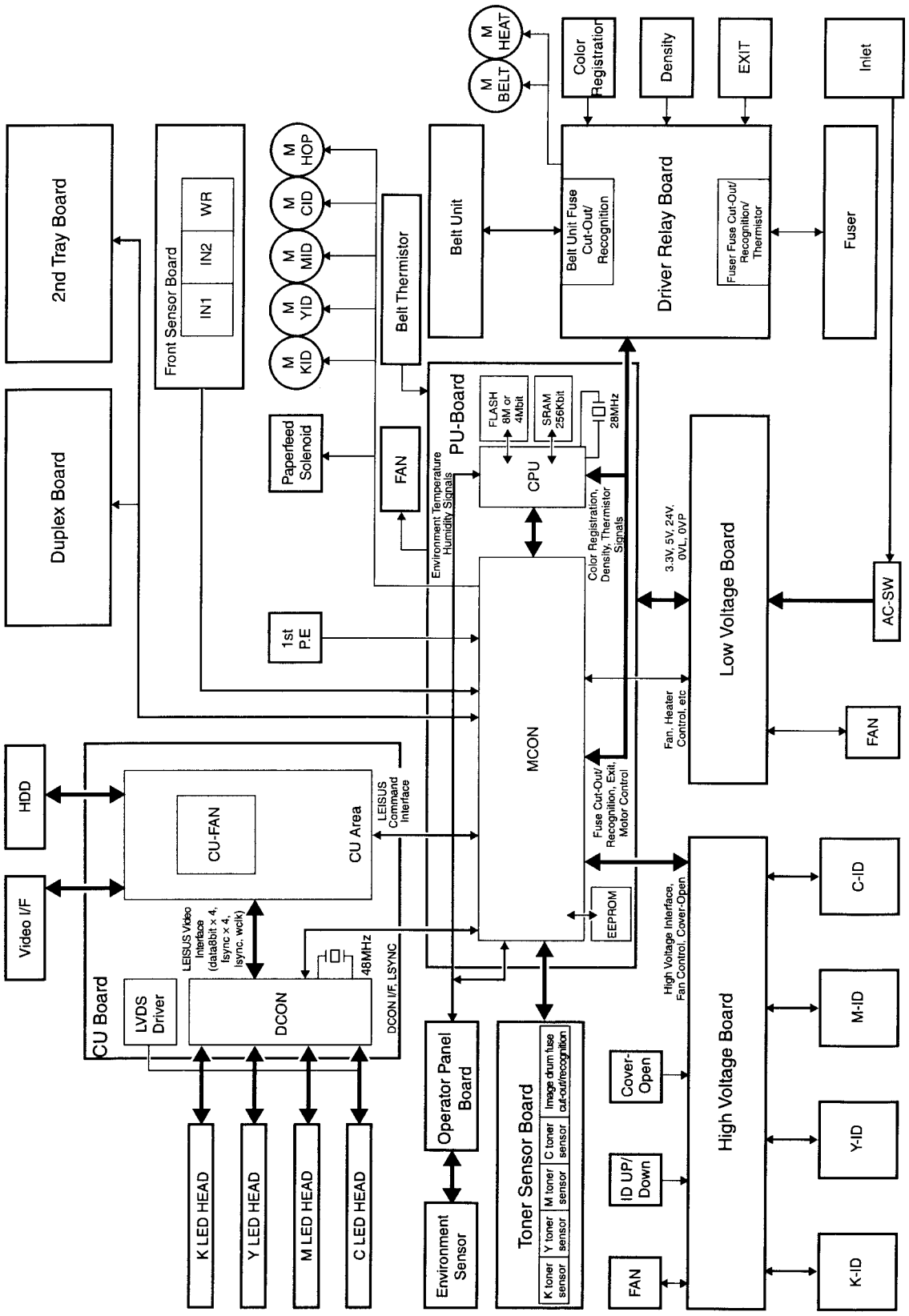


Figure 1-1

1.2 Printer Configuration

The inside of C5100 printers is composed of the following:

- Electrophotographic Processor
- Paper Paths
- Controller Block (CU and PU)
- Operator Panel
- Power Units (High Voltage Unit and Low Voltage Unit)

Figure 1-2 shows the configuration of each printer.

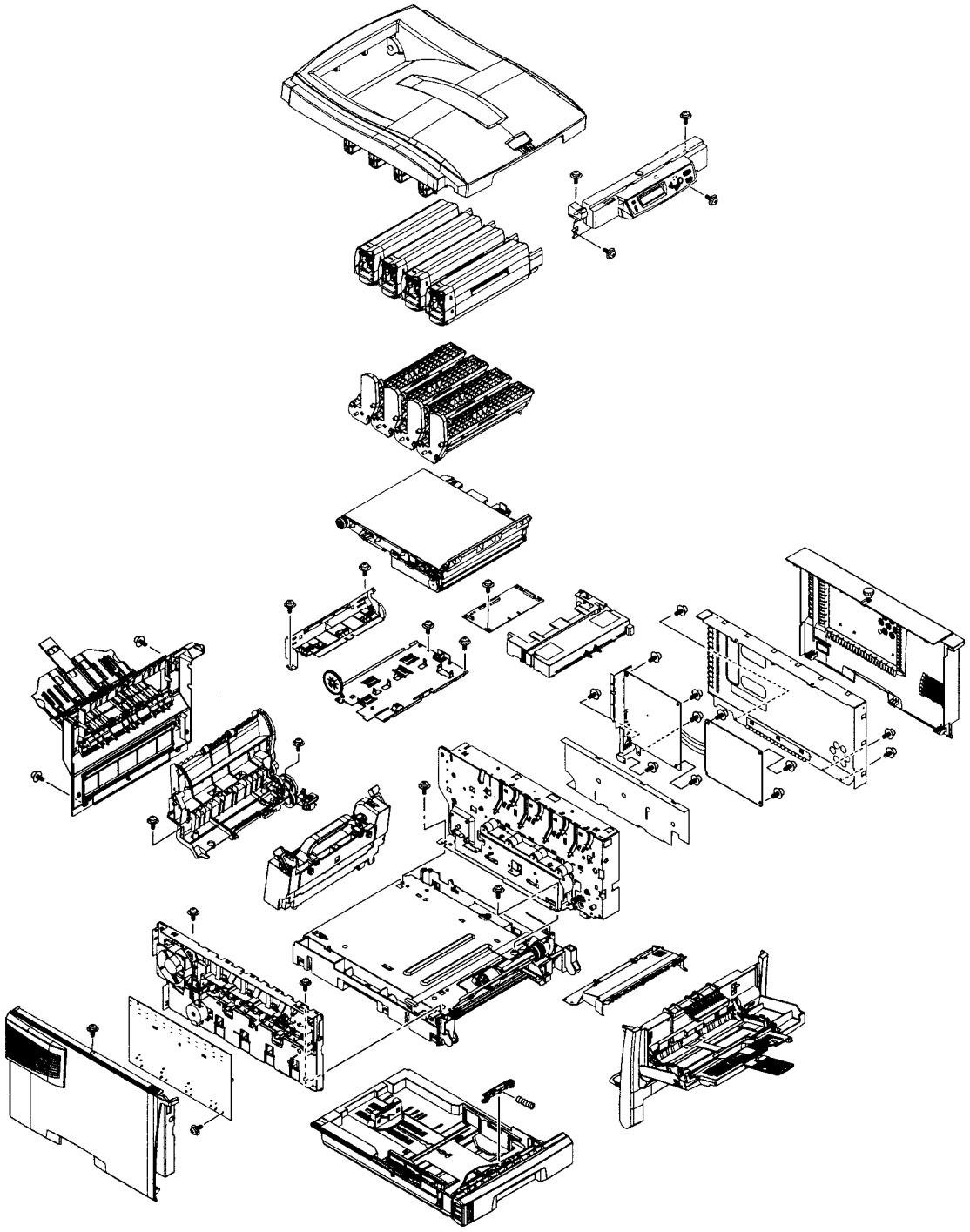
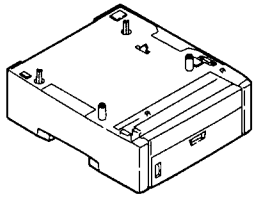


Figure 1-2

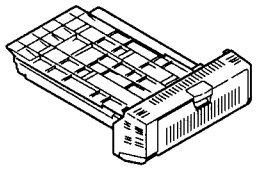
1.3 Option Configuration

The following options are available for C5100.

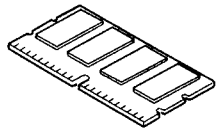
(1) 2nd Tray



(2) Duplex Unit



(3) Expansion Memory 64/256 MB



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1.4 Specifications

(1) External Dimensions
Height: 345 mm. Width: 422 mm. Length: 561 mm.

(2) Weight
Approx. 20 kg (except consumables)

(3) Paper
Type: Normal paper, Transparencies (Recommended: MLOHP01)
Size: Postal card, Legal 13" or 14", Executive, A4, A5, B5, A6 (A6 held in and fed from only 1st tray and front feeder)
Weight: 1st tray 55 kg to 103 kg (64 to 120 g/m^2)
Front feeder 55 kg to 172 kg (64 to 203 g/ m^2)

(4) Print Speed
Color: 12 pages per minute (Transparencies: 6 pages per minute)
Monochrome: 20 pages per minute (Transparencies: 12 pages per minute)
Postal Cards, Labels, Thick Paper: 8 pages per minute

(5) Resolution
600 x 600 dots per inch

(6) Power Input
100 VAC ±10%

(7) Power Consumption
Peak: 850W
Normal Operating: 400W (5% duty)
Idle: 80W
Power Save Mode: 18W or less

(8) Frequency
50Hz or 60Hz ± 2 Hz

(9) Noise
Operating: 54 dB (Without duplex unit and 2nd tray)
Standby: 40 dB
Power Saving: Background noise

(10) Consumable Life
Toner Cartridges: 5,000 pages (images) (5% duty, Each of Y, M, C and K)
Image Drums: 22,000 pages (images) (5% duty, Continuous printing, Each of Y, M, C and K)

(11) Parts Replaced Periodically
Fuser Unit: Every 45,000 pages (prints)
Belt Unit: Equivalent of 50,000 pages (prints) (3 pages/job)

(12) Temperature and Relative Humidity

Temperatures

Temperature condition

	Celsius	Remarks
Operating	10 to 32	17 to 27 Celsius (Temperatures to assure full color print quality)
Non-Operating	0 to 43	Power off
Storage (Max. One Year)	-10 to 43	With drum and toner
Delivery (Max. One Month)	-29 to 50	With drum and without toner
Delivery (Max. One Month)	-29 to 50	With drum and toner

Humidities

Humidity condition

	Relative Humidity (%)	Max. Wet-Bulb Temperature (Celsius)	Remarks
Operating	20 to 80	25	50 to 70% (for assurance of full color print quality)
Non-Operating	10 to 90	26.8	Power off
Storage	10 to 90	35	
Delivery	10 to 90	40	

(13) Printer Life

420,000 pages (on a A4-size basis) or five years

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2. PARTS REPLACEMENT

This section describes the procedure for replacing the parts, assemblies and units in the field. The replacing procedure is given for detachment. To attach, use the reverse procedure.

2.1 Precautions in Replacing Parts

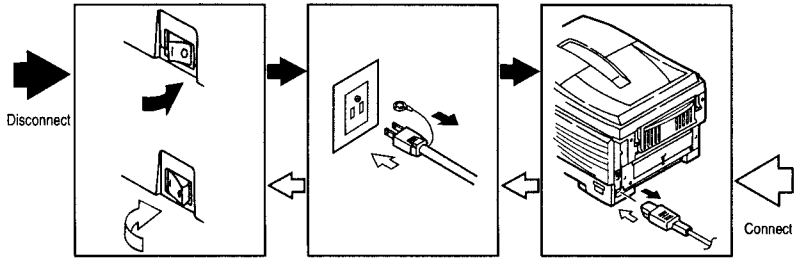
(1) Before replacing the parts, be sure to remove the AC cable and the interface cable.

(a) To remove the AC cable, always use the following procedure.

i) Flip the power switch of the printer off (to "O").
ii) Pull the AC inlet plug of the AC cable out of the AC receptable.
iii) Remove the AC cable and the interface cable from the printer.

(b) To connect the printer again, always use the following procedure.

i) Connect the AC cable and the interface cable to the printer.
ii) Insert the AC inlet plug into the AC receptacle.
iii) Flip the power switch of the printer on (to "I").



(2) Do not disassemble the printer so long as it operates properly.

(3) Minimize the disassembly. Do not detach parts other than those shown in the replacing procedure.

(4) For maintenance, use designated tools.

(5) Follow the order instructed to disassemble the printer. Incorrect order may damage the parts.

(6) Small parts such as screws and collars tend to get lost, so temporarily place and fix them in their original positions.

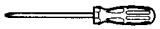
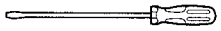
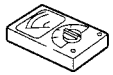
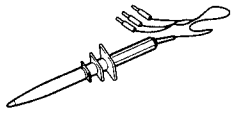
(7) When handling ICs and circuit boards such as microprocessors, ROMs and RAMs, do not use gloves that likely to have static.

(8) Do not place the printed circuit boards directly on the printer or the floor.

[Maintenance Tools]

Table 2-1 lists tools necessary to replace the printed circuit boards and the units.

Table 2-1 Maintenance Tools

No.	Service Tools		Q' ty	Place of use	Remarks
1		No. 1-100 Philips screwdriver	1	2~2.5 mm screws	
2		No. 2-200 Philips screwdriver, Magnetized	1	3~5 mm screws	
3		No. 3-100 screwdriver	1		
4		No. 5-200 screwdriver	1		
5		Digital multimeter	1		
6		Pliers	1		
7		Handy cleaner	1		
8		LED Head cleaner P/N 4PB4083-2248P001	1	Cleans LED head	
9		High voltage probe	1		

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2.2 Part Replacement Procedures

This section describes the procedures for replacing the parts and assemblies shown in the following disassembly chart:

2.2.1 Top Cover

(1) Open the top cover assy.

(2) Remove the eight screws ① to detach the cable cover ② and the top cover ③.

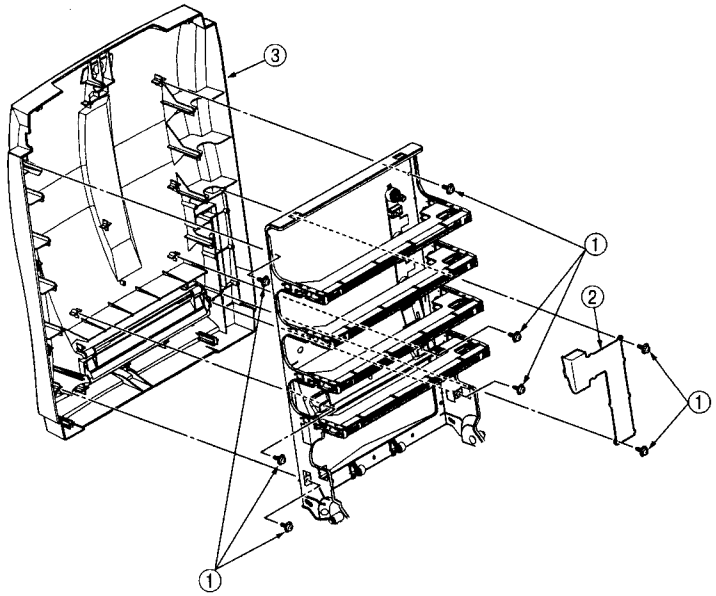

Figure 2-2-1 Top Cover

2.2.2 Left Side Cover

(1) Open the top cover ①.

(2) Open the feeder unit ②.

(3) Remove the screw ③ to detach the left side cover ④.

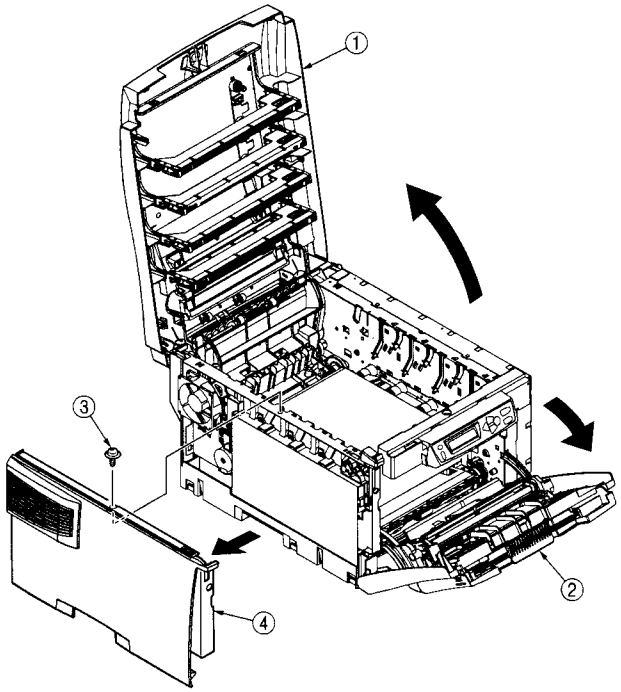

Figure 2-2-2 Left Side Cover

2.2.3 Right Side Cover

(1) Open the top cover ①.

(2) Open the feeder unit ②.

(3) Loosen the screw ③ to detach the right side cover ④.

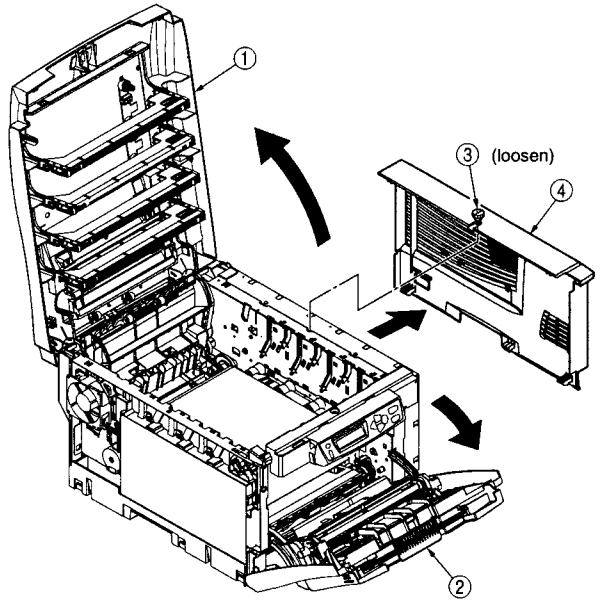

Figure 2-2-3 Right Side Cover

2.2.4 Face-Up Tray

(1) Open the face-up tray ① in the direction of the arrow, and disengage it at its two places to detach it.

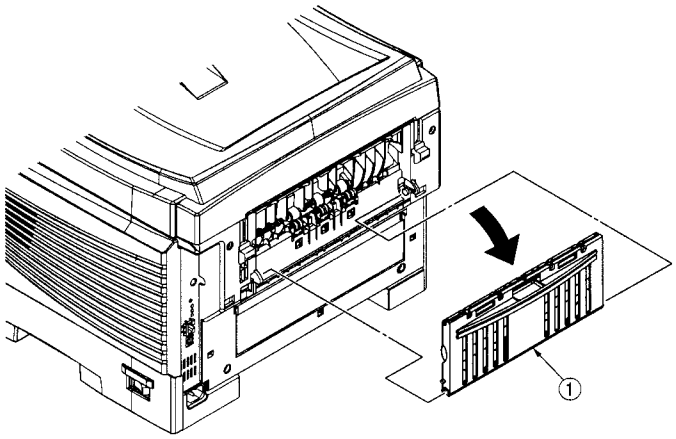

Figure 2.2.4 Face-Up Tray

2.2.5 Rear Cover

(1) Remove the two screws ① to detach the rear cover ②.

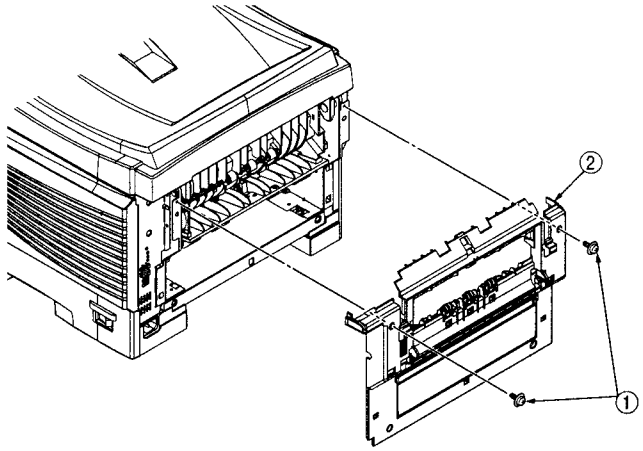

Figure 2-2-5 Rear Cover

2.2.6 LED Assy / LED Assy Springs

(1) Open the top cover ①.

(2) Remove the cable connection of, and disengage the two hooks of, the LED assy ② to detach the assy (the two springs ③ become detached together with the LED Assy ②).

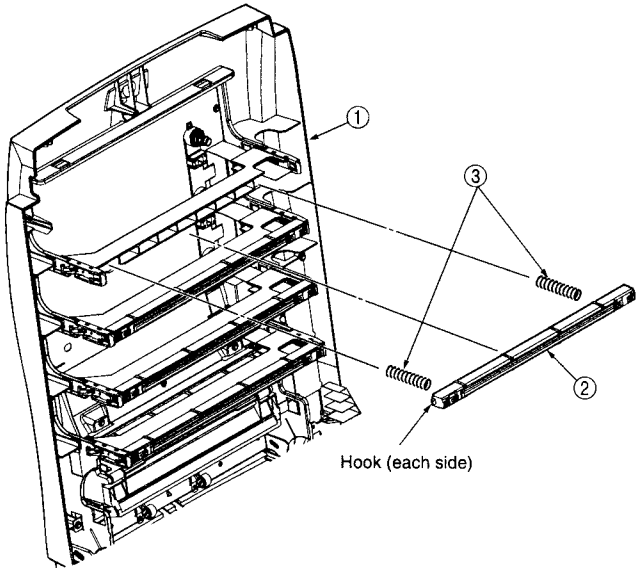

Figure 2-2-6 LED Assy / LED Assy Springs

2.2.7 Controller PWB

(1) Open the top cover.

(2) Remove the right side cover (see section 2.2.3).

(3) Unscrew the three screws ① to remove the plate-shield assy (GDI) ②.

(4) Remove the screw ③ and then the head connector ④.

(5) Remove the six screws ⑤ and the connector ⑥, then detach the controller PWB ⑦.

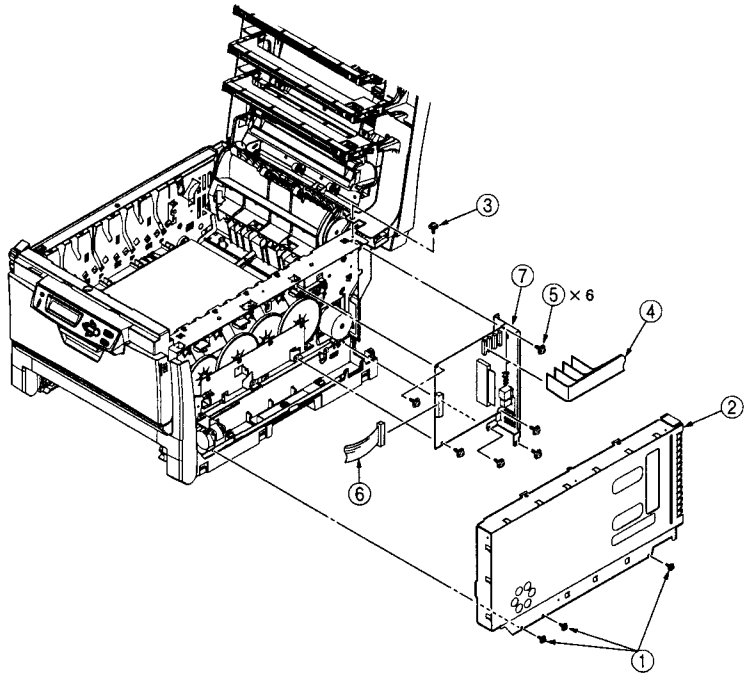

Figure 2-2-7 Controller PWB

2.2.8 Print Engine Controller PWB

(1) Remove the controller PWB [see section 2.2.7, steps (1) to (4)].

(2) Remove the three screws ① and all the connectors to detach the print engine controller PWB ②.

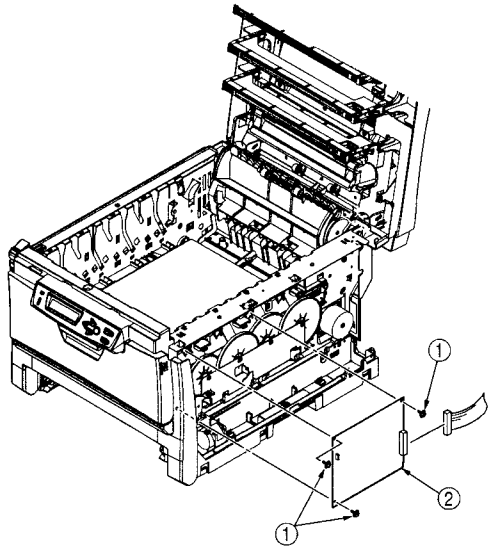

Figure 2-2-8 Print Engine Controller PWB

2.2.9 Top Cover Unit.

(1) Remove the top cover (see section 2.2.1).

(2) Remove the left side cover (see section 2.2.2).

(3) Remove the right side cover (see section 2.2.3).

(4) Remove the rear side cover (see section 2.2.5).

(5) Remove the plate-shield assy (GDI) [see section 2.2.7, step (2)].

(6) Remove the two E-shaped rings ① and the two springs - torsion ②, then detach the top cover unit ③.

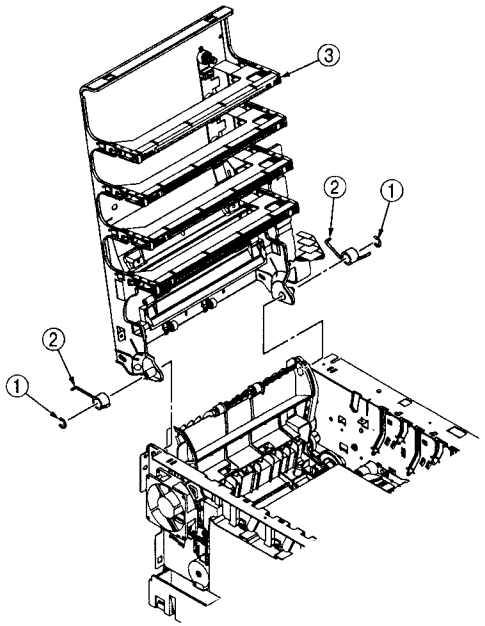

Figure 2-2-9 Top Cover Unit

2.2.10 Controller Panel Assy

(1) Open the top cover.

(2) Open the feeder unit.

(3) Remove the right side cover (see section 2.2.3).

(4) Remove the plate-shield assy (GDI) [see section 2.2.7, step (2)].

(5) Make control panel assy connector removal (see the section of Print Controller PWB).

(6) Remove the four screws ①, then detach the control panel assy ②.

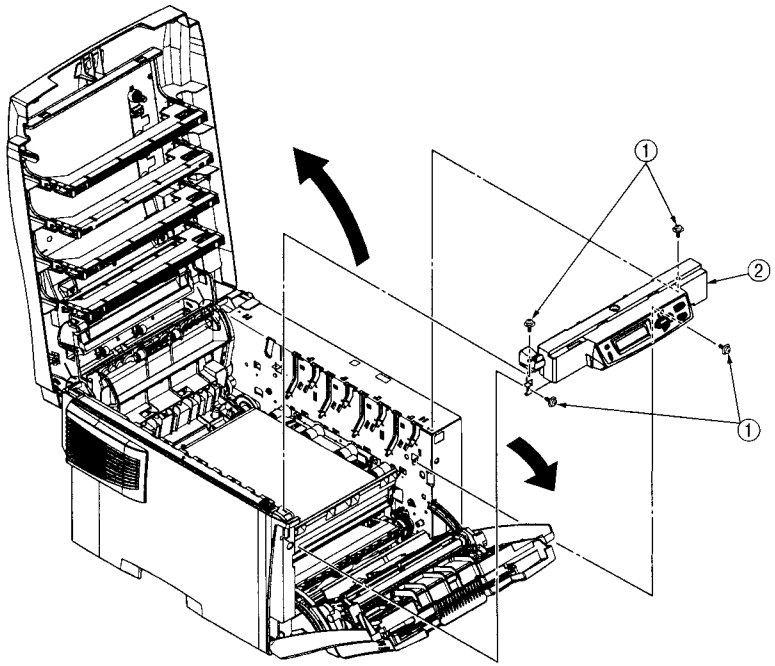

Figure 2-2-10 Control Panel Assy

2.2.11 Board RSP / Environment Sensor / Top Cover Handle

(1) Remove the control panel assy (see section 2.2.10).

(2) Disengage the two claws of the lever-lock ② to remove the frame OP ①, and remove the lever-lock ② and the spring-compression ③.

(3) Disengage the two claws of the cover assy OP ④ to remove it, and remove the springs torsion ⑤.

(4) Detach the board RSP ⑥, the environment sensor ⑦, the cable ⑧ and the harness ⑨.

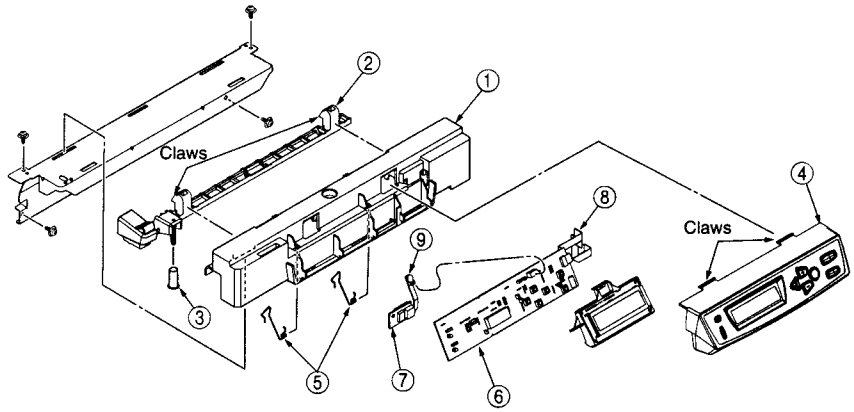

Figure 2-2-11 Board RSP / Environment Sensor / Top Cover Handle

2.2.12 Low Voltage Power Unit / Fan 1 / Fan 2 / Hopping Motor / Fuser Motor

(1) Remove the print controller PWB (see section 2.2.8).
(2) Remove the controller PWB (see section 2.2.7).
(3) Remove the film ① and demount the fan 1 ②.
(4) Remove the two screws ③ and the three connectors to demount the POW unit ④.
(5) Demount the fan 2 ⑤ by releasing claw engagement.
(6) Remove the two screws ⑥ and the connector to detach the hopping motor ⑦.
(7) Remove the two screws ⑧ and the connector to detach the fuser motor ⑨.

Note! When reassembling the fan 2 ⑤, check the attachment direction.

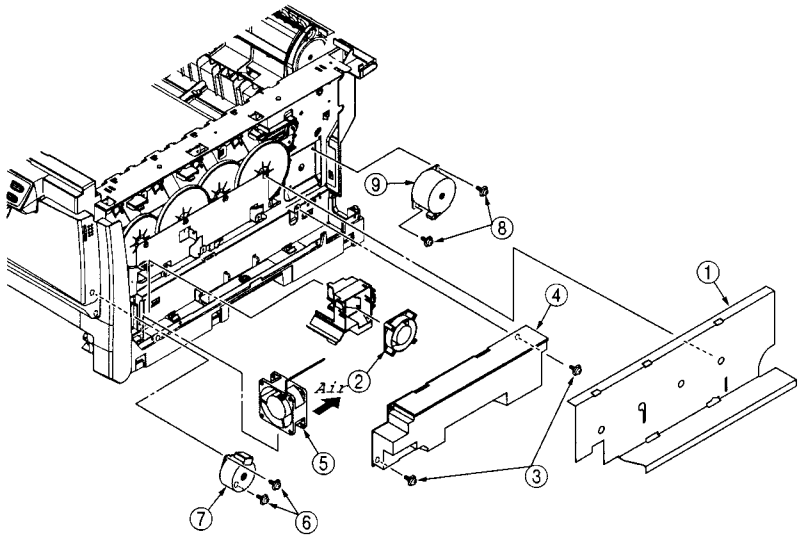

Figure 2-2-12 Low voltage Power Unit / Fan 1 / Fan 2 / Hopping Motor / Fuser Motor

2.2.13 Board-PRD

(1) Remove the right side cover (see section 2.2.3).
(2) Remove the print engine controller PWB and the controller PWB (see sections 2.2.7 and 2.2.8).
(3) Remove the film and the low voltage power unit (see section 2.2.12).
(4) Remove the three screws ① and the two E-shaped snaps ② to remove the plate-outer ③.
(5) Remove the gear-idle-ID - K ④, Y and C ⑤, and M ⑥, and the spring ⑦ of the solenoid.
(6) Unlatch (⑧) the guide assy - side R ⑨ and, sliding the assy, detach the board-PRD ⑩ and the nine springs ⑪.

Note! When reassembling the board-PRD, do not forget to attach the spring of the solenoid ⑦.

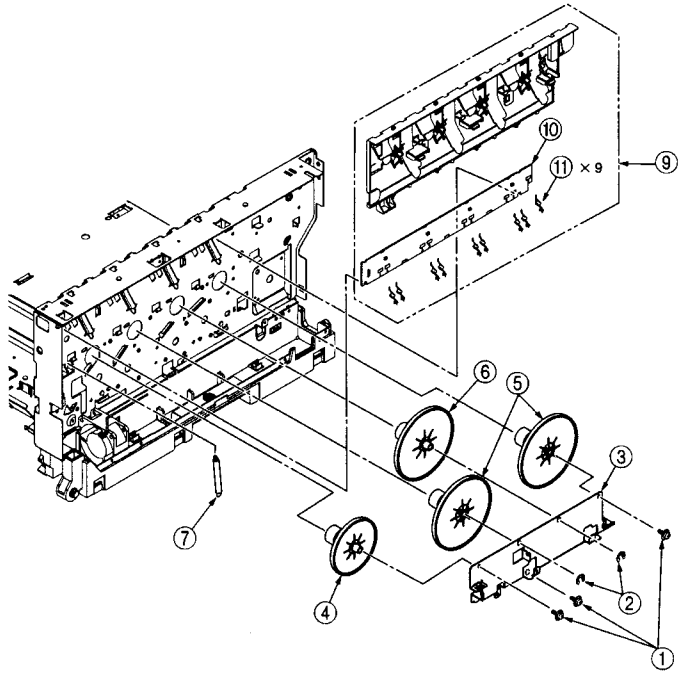

Figure 2-2-13 Board-PRD

2.2.14 Guide - Eject Assy / Color Registration Assy / Board-RSM

(1) Remove the left side cover, the write side cover, the rear cover and the top cover unit (see sections 2.2.2, 2.2.3, 2.2.5 and 2.2.9).

(2) Remove the engine controller PWB, the controller PWB and the film [see sections 2.2.7 and 2.2.8, and step (3) of section 2.2.12].

(3) Unscrew the two screws ① to remove the plate-heat ②.

(4) Remove the two springs - torsion ③ and disengage the latches ④ to remove the cover-driver ⑤.

(5) Make two-screw ⑥ and connector removal to detach the color registration assy ⑦.

(6) Make two-screw ⑧ and connector removal to detach the guide eject assy ⑨.

(7) Make screw ⑩ and connector removal to detach the board-RSM ⑪.

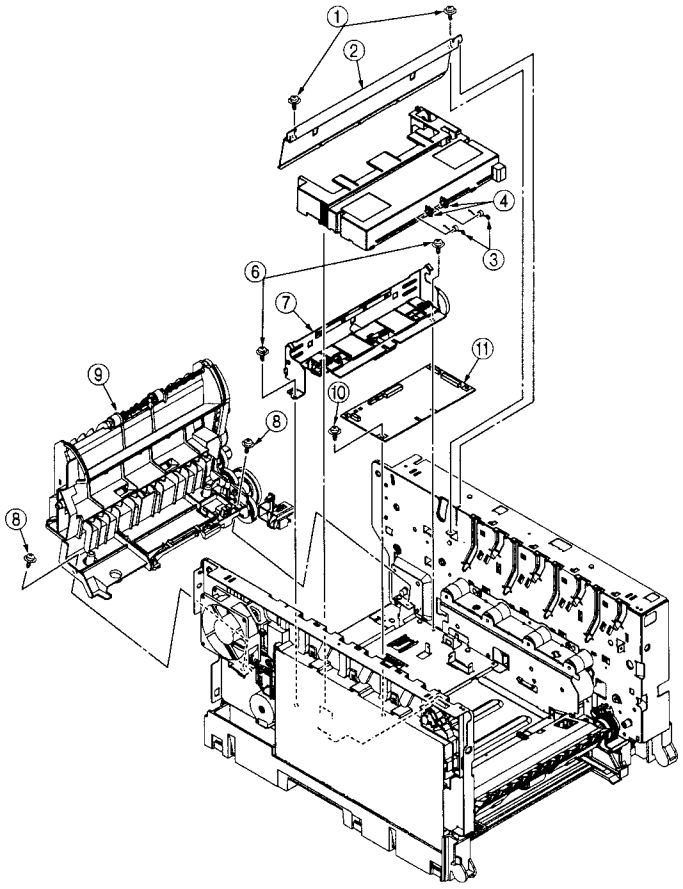

Figure 22-14 Guide - Eject Assy / Color Registration Assy / Board-RSM

2.2.15 Fan 3 / Belt Motor / High Voltage Power Supply Board / Cover Open Switch / Image Drum Up/Down Sensor

(1) Remove the left side cover (see section 2.2.2).

(2) Make screw ① and connector removal to detach the belt motor ②.

(3) Remove the screw ③, disengage the latch ④ and make connector removal to detach the high voltage power supply board ⑤.

(4) Remove the four screws ⑥ to remove the cover-rear ⑦.

(5) Remove the connector and, turning the fan 3 ⑧, detach the fan 3.

(6) Remove the connector and unlatch (⑨) the cover open switch ⑩ to detach the switch.

(7) Remove the connector and pull out the lock-piece ⑪ to detach the image drum up/down sensor ⑫.

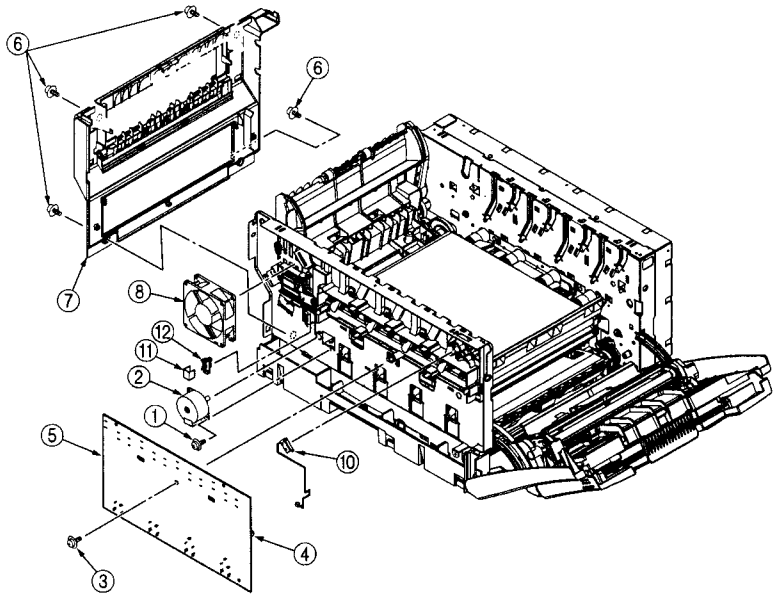

Figure 2-2-15 Fan 3 / Belt Motor / High Voltage Power Supply Board / Cover Open Switch / Image Drum Up/Down Sensor

2.2.16 Main Motors / Solenoid / Paper-End Sensor

(1) Remove the left side cover, right side cover, rear side cover and top cover units (see sections 2.2.2 to 2.2.4, and 2.2.8).
(2) Remove the print engine controller PWB, the controller PWB and the film [see sections 2.2.6, 2.2.7 and 2.2.11 (3)].
(3) Remove the fan and the low voltage power unit (see section 2.2.11).
(4) Remove the plate-heat, the eject assy, the cover-driver and the board-RSM (see section 2.2.14).
(5) Unscrew the two screws ① to remove the plate-driver ②.
(6) Disengage the latch ③ to remove the cover-hopping ④.
(7) Remove the image drum up/down sensor ⑤.
(8) Disengage the latch ⑥ to remove the gear assy - planet ⑦, the shaft ⑧ and the three rollers ⑨.
(9) Unscrew the two screws ⑩ to remove the side plate assy ⑪.
(10) Remove the two screws ⑫ and the two E rings ⑬, then remove the plate-outer ⑭, the gear-idle K ⑮, and Y and C ⑯, and M ⑰.
(11) Unscrew the three screws ⑱ to remove the plate-inner ⑲.
(12) Remove the screws ⑳ (one screws each motor-ID ㉑) and the connectors, then uninstall the motors-ID ㉑.
(13) Remove the screw ㉒ to uninstall the solenoid ㉓.
(14) Remove the spring ㉔, disengage the claw and remove the bushing ㉕, the hopping roller shaft ㉖ and the frame-hopping ㉗.
(15) Detach the paper-end sensor ㉘ and the paper-end lever ㉙.

2.2.16 Main Motors / Solenoid / Paper-End Sensor

(1) Remove the left side cover, right side cover, rear side cover and top cover units (see sections 2.2.2 to 2.2.4, and 2.2.8).
(2) Remove the print engine controller PWB, the controller PWB and the film [see sections 2.2.6, 2.2.7 and 2.2.11 (3)].
(3) Remove the fan and the low voltage power unit (see section 2.2.11).
(4) Remove the plate-heat, the eject assy, the cover-driver and the board-RSM (see section 2.2.14).
(5) Unscrew the two screws ① to remove the plate-driver ②.
(6) Disengage the latch ③ to remove the cover-hopping ④.
(7) Remove the image drum up/down sensor ⑤.
(8) Disengage the latch ⑥ to remove the gear assy - planet ⑦, the shaft ⑧ and the three rollers ⑨.
(9) Unscrew the two screws ⑩ to remove the side plate assy ⑪.
(10) Remove the two screws ⑫ and the two E rings ⑬, then remove the plate-outer ⑭, the gear-idle K ⑮, and Y and C ⑯, and M ⑰.
(11) Unscrew the three screws ⑱ to remove the plate-inner ⑲.
(12) Remove the screws ⑳ (one screws each motor-ID ㉑) and the connectors, then uninstall the motors-ID ㉑.
(13) Remove the screw ㉒ to uninstall the solenoid ㉓.
(14) Remove the spring ㉔, disengage the claw and remove the bushing ㉕, the hopping roller shaft ㉖ and the frame-hopping ㉗.
(15) Detach the paper-end sensor ㉘ and the paper-end lever ㉙.

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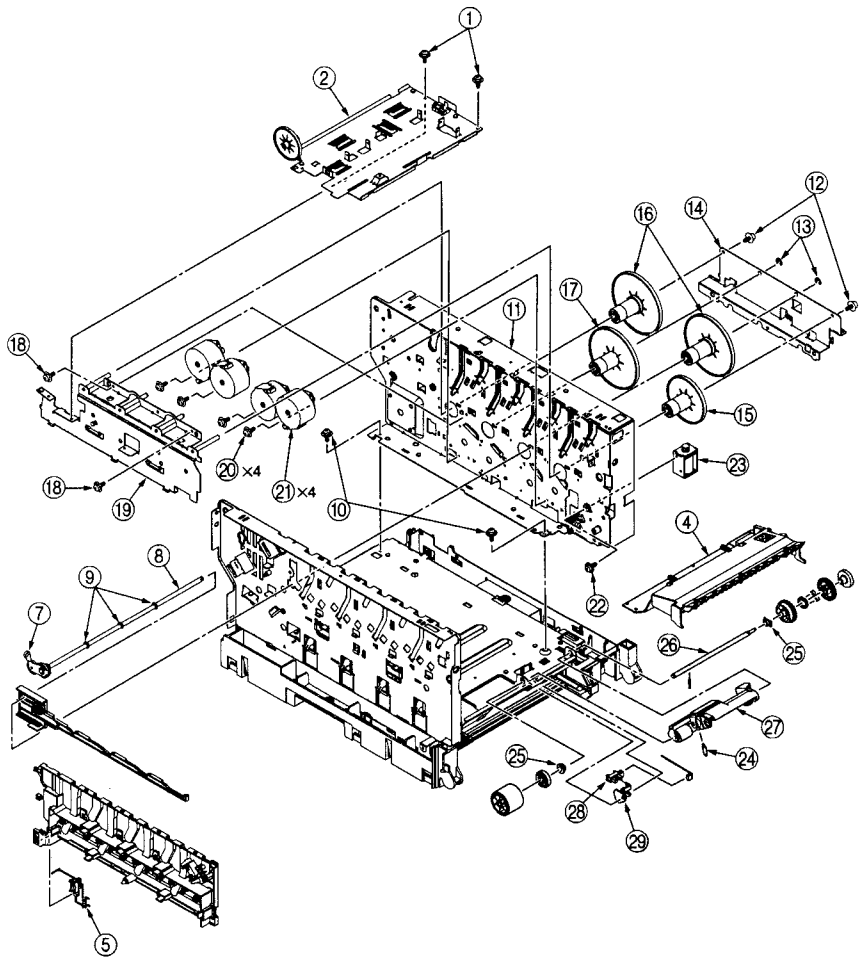

Figure 2-2-16 Main Motors / Solenoid / Paper-End Sensor

2.2.17 Multipurpose Tray (MPT) Assy

(1) Open the MPT assy ①.

(2) Remove the two stoppers and the two supports to detach the MPT assy ①.

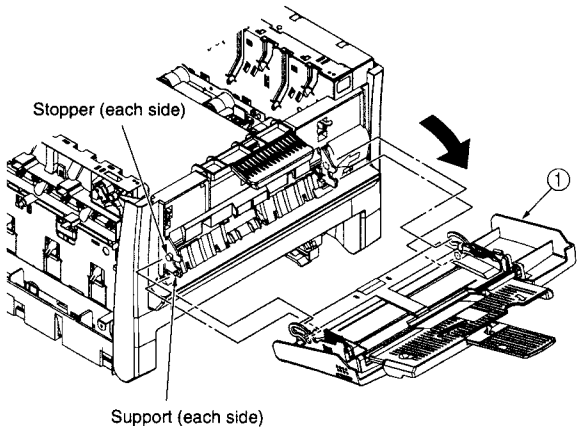

Figure 2-2-17 MPT Assy

2.2.18 Feeder Unit / Board-RSF / Multipurpose Tray (MPT) Hopping Roller / Multipurpose Tray (MPT) Frame Separator / Cover-Front

(1) Open the top cover.

(2) Remove the left side cover (see section 2.2.3).

(3) Make plate-shield (GDI) and connector removal (see section 2.2.7).

(4) Disengage the two claws of the stay ① and, sliding the feeder unit ②, detach the feeder unit.

(5) Remove the cover sensor ③ by releasing claw engagement.

(6) Make connector removal to detach the board-RSF ④.

(7) Remove the lever ⑤ by turning it until it is unlocked.

(8) Remove the two front claws to detach the feed assy ⑥.

(9) Remove the two lock shafts ⑦ and the two springs ⑧ and disengage the four claws to detach the hopping roller assy ⑨.

(10) Remove the hopping roller shaft ⑩.

(11) Remove the two supports to detach the MPT frame separator ⑪, and remove the spring ⑫.

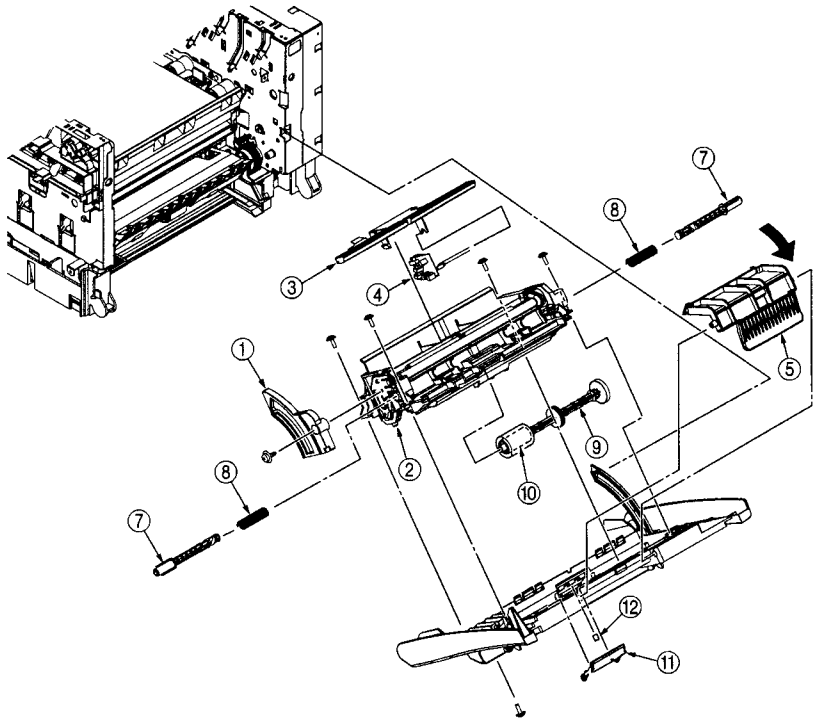

Figure 2-2-18 Feeder Unit / Board-RSF / MPT Hopping Roller / MPT Frame Separator / Cover-Front

2.2.19 Feed Roller

(1) Remove the cassette.

(2) Unlatch and detach the feed roller ①.

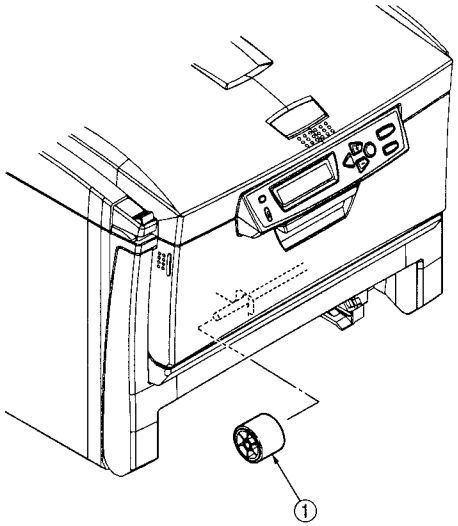

Figure 2-2-19 Feed Roller

2.2.20 Duplex Unit

(1) Slide out the duplex unit ①.

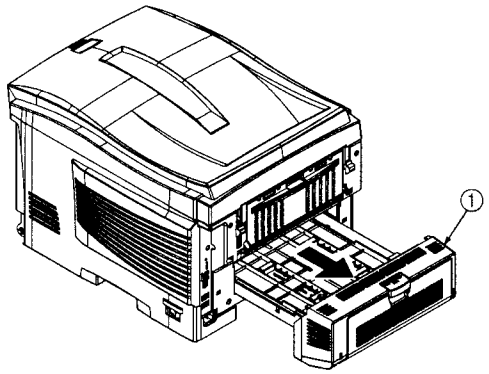

Figure 2-2-20 Duplex Unit

2.2.21 Upper Assy / Rear Assy

(1) Remove the duplex unit (see section 2.2.20).

(2) Warping the upper assy ①, detach it.

(3) Warping the rear assy ②, detach it.

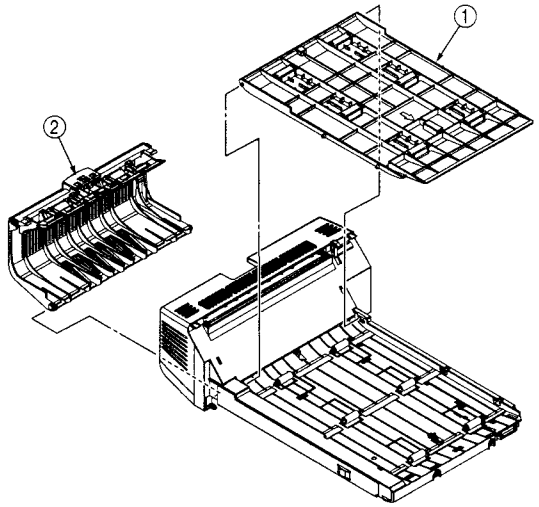

Figure 2-2-21 Upper Assy / Rear Assy

2.2.22 Duplex Transport Assy

(1) Turn over the duplex transport assy.

(2) Unscrew the three screws ① to remove the plate ②.

(3) Make connector removal and claw disengagement to remove the PCB-V7X ③.

(4) Unscrew the screw ④ to remove the motor assy ⑤.

(5) Remove the gear ⑥ and the bushing ⑦ to remove the roller ⑧. Then the earth ⑨ and the bushing ⑩ become detached.

(6) Remove the pulleys ⑪. The mini-pitch belts ⑫ become detached together with the pulley.

(7) Remove the holders ⑬ and the bushings ⑭ to remove the rollers ⑮. The earth spring becomes detached together with each roller.

(8) Disengage the four claws to remove the cover ⑯.

(9) Remove the fan ⑰.

(10) Remove the spring ⑱ to remove the solenoid ⑲.

(11) Release claw engagement to remove the solenoid ⑳.

(12) Remove the lever ㉑. The lever ㉒ and the spring ㉓ become detached together with the lever ㉑.

(13) Remove the actuators ㉔ and ㉕.

(14) Remove cable connection and then, by claw warping, detach the five transport sensors.

(15) Unscrew the screw ㉖ to remove the lock lever ㉗. Then the spring becomes detached.

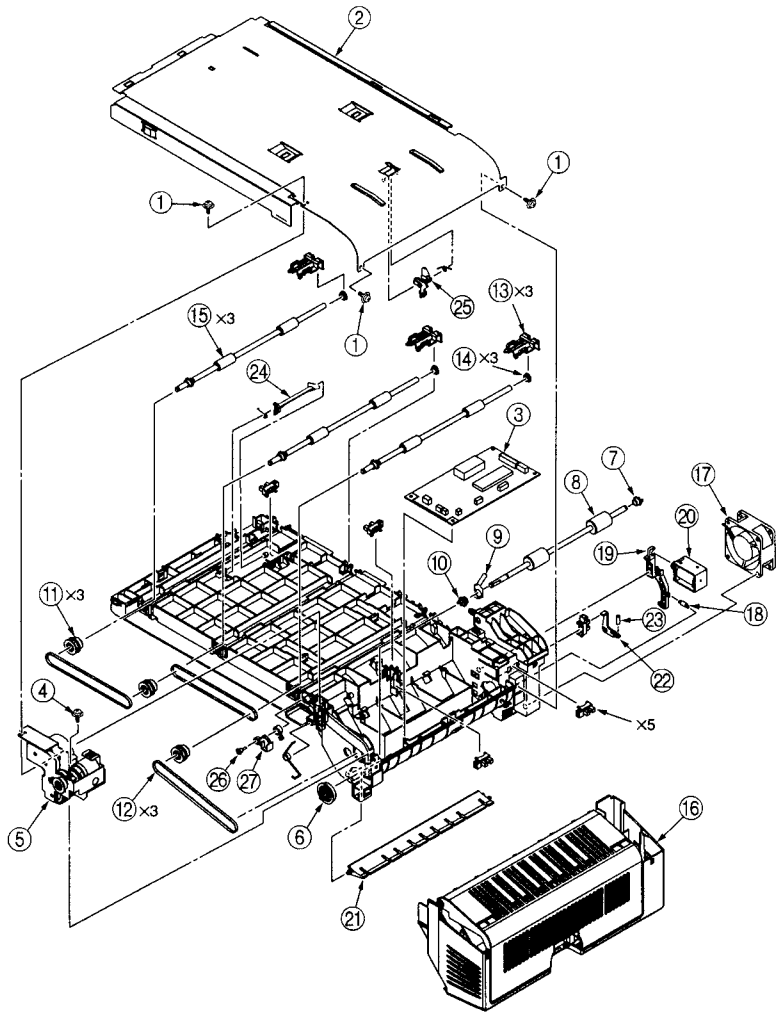

Figure 2-2-22 Duplex Transport Assy

2.2.23 Shaft Eject Assy (FU) / Shaft Eject Assy (FD) / Eject Sensor

(1) Detach the eject assy ①.

(2) Disengage the latch ② to separate the guide-eject-lower ③ and the guide-eject-upper ④.

(3) Remove the gear-idle-eject ⑤, then detach the shaft assy - eject (FU) ⑥ and the shaft assy - eject (FD) ⑦.

(4) Make connector and guide-cable R ⑧ removal.

(5) Detach the lever - eject sensor ⑨ and then the eject sensor ⑩.

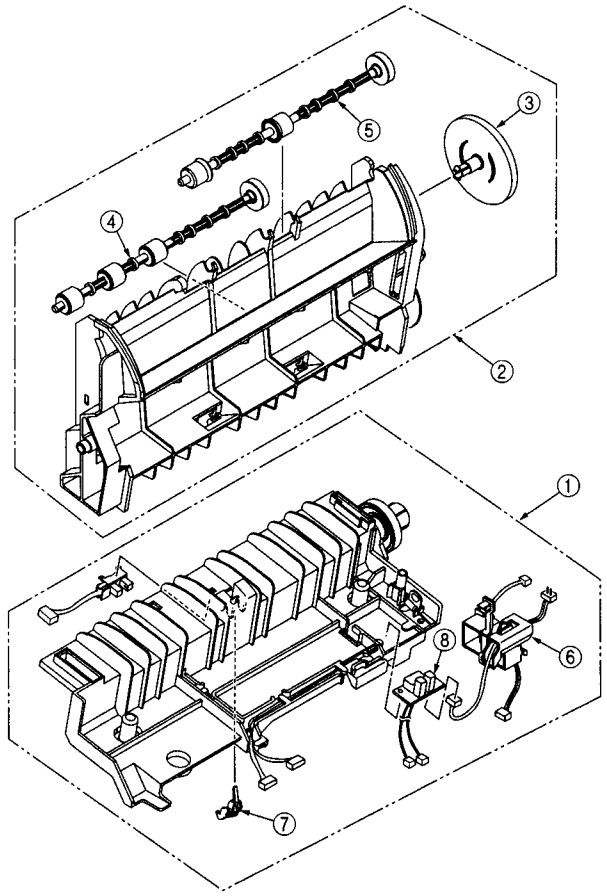

Figure 2-2-23 Shaft Eject Assy (FU) / Shaft Eject Assy (FD) / Eject Sensor

3. ADJUSTMENTS

Adjustments on C5100 printers are made by operator panel key entry. In addition to a standard menu, there is a maintenance menu in the display of their operator panels. The menu that serves the purpose of intended adjustment is to be selected.

3.0 System Maintenance Menu

Turning on printer power while holding the MENU+ and MENU- keys down activates System Maintenance menu. The menu is only displayed in English on a printer to any destination.

Note! System Maintenance menu, from which settings such as printer destinations can be changed, is hidden from users' view.

Table 3-0 Maintenance Menu Display Table

Category	Operator Panel Display		DF	Function
	Item (Upper Display)	Value (Lower Display)		
OKIUSER	OKIUSER	ODA OEL APS JP1 JPOEM1 OEMA OEML	*	Sets a destination. JPOEM1: Japan OEMs OEMA: A4 default, Overseas OEMs OEML: Letter default, Overseas OEMs With the selection of a destination, printer rebooting is performed.
ENG STATUS PRINT	ENG STATUS PRINT	EXECUTE		Selected using the ENTER switch. Prints engine information after initialization, at the press of the ONLINE switch after the selection.
PAGE CNT PRINT	PAGE CNT PRINT	ENABLE DISABLE	*	Sets whether to show the total number of pages on print menu map.
FUSE KEEP MODE	PAGE KEEP MODE	EXECUTE		Places the printer online with the issue of a command from the CU to the PU by the press of the ENTER switch. While printer power is on, replace consumable part(s) with new one(s) and check printer operation [without cutting the fuse(s) for the new part(s) and without counting the operation on the removed part(s)]. The check mode ends by turning off the power, and is disabled at next turning-on of the power.
NETWORK				Reserved for expansion. No item or value display is provided at present.
ENGINE DIAG MODE				Used to enter engine self-diagnostic mode.

The switch operation and LCD display during an engine self-diagnostic mode, which are specified by engine firmware, differ from controller firmware operating specifications. The engine self-diagnostic mode is enabled in a controller board removed configuration.

Refer to the engine block specification for C5100 for further details if necessary.

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3.1 Maintenance Modes and Their Functions

3.1.1 Maintenance Menu

Maintenance menu is contained in a standard menu category. Items that can be set from Maintenance menu are as follows:

Maintenance Menu

Values in shaded areas are initial settings.

Category	Operator Panel Display		Function
	Item (Upper Display)	Value (Lower Display)	
Maintenance Menu	RESET MENU	ENTER	Initializes menu settings.
	SAVE MENU SETTING(S)	ENTER	Stores current menu settings.
	RESTORE STORED MENU SETTING(S)	ENTER	Changes menu settings to stored ones. Displayed only when menu settings have been stored.
	POWER SAVING	ENABLE DISABLE	Sets Power Save mode enabled/disabled. Shift time to enable Power Save mode can be changed using "POWER SAVE SHIFT TIME" on "SYSTEM CONFIG. MENU".
	NORMAL PAPER BLACK SETTING	0 +1 +2 -2 -1	Corrects print nonuniformity due to temperature variation. With faded images, change the value. With scattering or snowing images in print output of high print density, decrement the value. With faded images in print output of high print density, increment the value.
	NORMAL PAPER CLOLR SETTING	0 +1 +2 -2 -1	Corrects print nonuniformity due to temperature variation. With faded images, change the value. With scattering or snowing images in print output of high print density, decrement the value. With faded images in print output of high print density, increment the value.
	TRANSPAR-ENCY BLACK SETTING	0 +1 +2 -2 -1	Corrects print nonuniformity due to temperature variation. With faded images on transparency sheets, change the value. With scattering or snowing images in print output of high print density, decrement the value. With faded images in print output of high print density, increment the value.
	TRANSPAR-ENCY COLOR SETTING	0 +1 +2 -2 -1	Corrects print nonuniformity due to temperature variation. With faded images on transparencies, change the value. With scattering or snowing images in print output of high print density, decrement the value. With faded images in print output of high print density, increment the value.

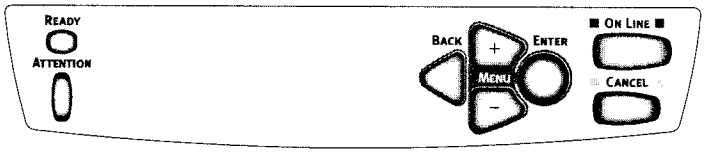
3.1.2 Engine Maintenance Mode

Engine Maintenance mode includes three modes, levels 1 to 3. The level 1 is intended for assistance in checking media transport systems and the basic operations of printing systems etc. The level 2, which sets consumable counters and tests color registration adjustment function, does not require relatively special knowledge. Working, including process parameter setting, with the level 3, which contains PU individual experimental elements, takes expertise. Basically items other than those in the level 1 must not be used.

3.1.2.1 Operator panel

Operating descriptions on self-diagnosis are premised on the following operator panel layout.

For ODA



For OEL

3.1.2.2 Normal self-diagnostic mode (level 1)

The following is the menu of a normal self-diagnostic mode.

- Switch Scan Test
- Motor and Clutch Test
- Test Pattern Execution
- NVM Initialization
- Consumable Counter Display
- Consumable Counter Display - Continuous

3.1.2.2.1 Entering self-diagnostic mode (level 1)

1. While holding the MENU+ and MENU- keys down at the same time, turn printer power on to enter System Maintenance mode.
2. Use MENU+ or MENU- key keystrokes until "DIAGNOSTIC MODE" appears (a few keystrokes).

DIAGNOSTIC MODE	
XX.XX.XX	FACTORY/SHIPPING

3. XX.XX.XX in the display indicates a ROM version. A factory working mode setting, which is usually set to S-MODE of SHIPPING, is at the right of the lower display.
4. Go to each self-diagnosis step by using the MENU+ or MENU- key (pressing the MENU+ or MENU- key rotates menu items).

3.1.2.2.2 Exiting self-diagnostic mode

1. Turn printer power off and, after ten seconds, on again.

3.1.2.3 Switch scan test

This self-diagnosis is used when input sensor and switch checking is made.

1. Enter the normal diagnostic mode, and press the MENU+ or MENU- key until "SWITCH SCAN" is shown on the upper display (the MENU+ key increments a test item and the MENU- key decrements a test item).

SWITCH SCAN

2. Table 3-1 lists SWITCH SCAN numbers. Press and the MENU+ or MENU- key until the SWITCH SCAN number for unit(s) to be tested shows up on the upper display (the MENU+ key increments an item and the MENU- key decrements an item).
3. In response to the press of the ENTER key, the test on the unit(s), the SWITCH SCAN number begins blinking and, carrying the current status of the unit(s) being tested, the number(s) (1 to 4) corresponding to the unit(s) are displayed.

SWITCH SCAN 00
1=H 2=L 3=H 4=L

Operate the unit(s) (figure 3-1). Indications for each unit are provided in their portion of the LCD display (Indicated meanings vary with units (sensors etc). See table 3-1 for details).

4. When the CANCEL key is pressed, the SWITCH SCAN number goes back to an indication view (stops blinking).
5. Repeat steps 2 through 4 as necessary.
6. To end the test, press the BACK key (the display is restored to the view of step 1).

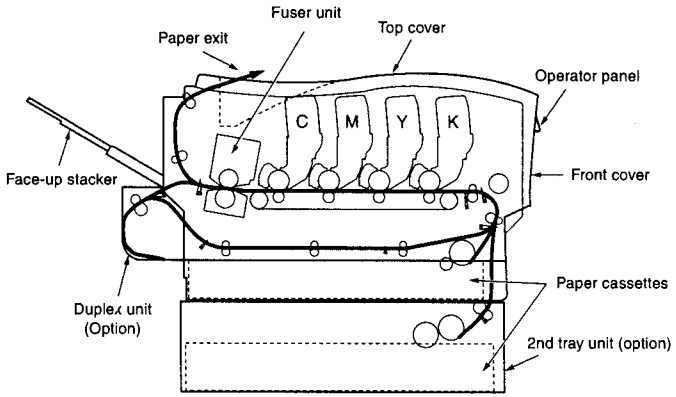


Figure 3-1 Switch Sensor Positions

Table 3-1 SWITCH SCAN Display Detail

ROW SCAN NO.	1	Display	2	Display	3	Display	4	Display
SWITCHSCAN00	1st-Paper-End Sns	L: Paper present H: Paper absent			Hopping Sns	L: Paper present H: Paper absent	Front In Sns	L: Paper present H: Paper absent
SWITCHSCAN01	Write Sns	L: Paper present H: Paper absent	Exit Sns	L: Paper present H: Paper absent				
SWITCHSCAN02	Toner-K Sns	L: Light reflected H: Light shielded	Toner-C Sns	L: Light reflected H: Light shielded	Toner-M Sns	L: Light reflected H: Light shielded	Toner-Y Sns	L: Light reflected H: Light shielded
SWITCHSCAN03	Cover-Upper	L: Cover open H: Cover close						
SWITCHSCAN04								
SWITCHSCAN05								
SWITCHSCAN06								
SWITCHSCAN07								
SWITCHSCAN08	Aligment-Left-Sns	AD Value ***H	Aligment-Right-Sns	AD Value ***H	Density-Sns	AD Value ***H		
SWITCHSCAN09	Upper-Center-Thermister	AD Value ***H			Lower-Center-Thermister	AD Value ***H		
SWITCHSCAN10	Hum Sns	AD Value ***H	Temperture-Sns	AD Value ***H	INNER	AD Value ***H		
SWITCHSCAN11(Option)	Dup-In Sns	L: Paper absent H: Paper present	Dup-Rear Sns	L: Paper absent H: Paper present	Dup-Rear Cover	L: Cover open H: Cover close	Dup-Front Sns	L: Paper absent H: Paper present
SWITCHSCAN12(Option)	Dup Bottom Sns	L: Absence detected H: Presence detected						
SWITCHSCAN13(Option)	2nd-Paper-End Sns	L: Paper absent H: Paper present			2nd-Cover Sns	L: Paper absent H: Paper present		
SWITCHSCAN14(Option)					2nd-Hopping Sns	L: Paper absent H: Paper present		
SWITCHSCAN15(Option)								
SWITCHSCAN16(Option)								
SWITCHSCAN17(Option)								
SWITCHSCAN18(Option)								
SWITCHSCAN19(Option)								
SWITCHSCAN20(Option)								
SWITCHSCAN21(Option)								
SWITCHSCAN22(Option)								
SWITCHSCAN23(Option)								
SWITCHSCAN24								
SWITCHSCAN25	UP/DOWN SNS							

3.1.2.4 Motor and clutch test

This self-check routine is used for motor and clutch testing.

1. Go into the self-diagnostic (level 1) mode, press the MENU+ or MENU- key until upper display of "MOTOR & CLUTCH TEST" is brought up, and press the ENTER key (the MENU+ key increments a test item and the MENU- key decrements a test item).
2. The names of units to be tested are listed in table 3-2. Press the ONLINE or CANCEL key to show the name of a unit that is to be tested on the lower display (the ONLINE key increments an item and the CANCEL key decrements an item).

MOTOR & CLUTCH TEST
K - ID - ID MOTOR

3. Pressing the ENTER key starts the test of the unit, blinking the displayed name of the unit. The unit is driven for 10 seconds (refer to figure 3-3).

   Note! The view of step 2 is restored after the 10-second driving, and the unit is driven again with the press of the corresponding switch.
   - Clutch solenoid on-off operations are repeated in normal printing driving (solenoids whose mechanical structures do not permit their single driving operate motors concurrently with them).

4. Use the CANCEL key to stop the drive of the unit (the display for the unit remains the same).
5. Repeat the cycle of steps 2 through 4 as needed.
6. Pressing the BACK key ends the test (the display is restored to step 1).

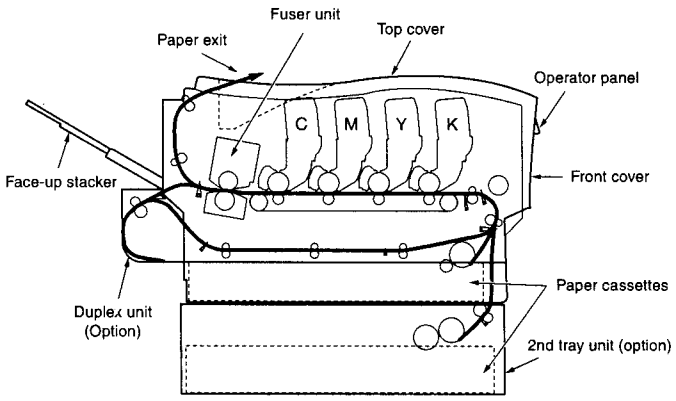


Figure 3-3

3.1.2.5 Test printing

This self-diagnostic routine is used when PU-inside test patterns are printed. The other test patterns are in controller's storage.

1. Go into the self-diagnostic (level 1) mode, press the MENU+ or MENU- key until "TEST PRINT" comes into view in the upper display, and press the ENTER key (the MENU+ key is for test item increment, and the MENU- key for test item decrement).
2. Items applied only to test printing are shown on the lower display. Press the MENU+ or MENU- key until an item to be set appears, and hit the ENTER key (the MENU+ key is for item increment, and the MENU- key for item decrement) [When items need not be set (must be left at their defaults), go to step 5].
3. Press the MENU+ or MENU- key and, when the item that has been set in step 2 is reached, press the Enter key. The item and its setting are displayed on the upper and lower panel, respectively. The setting is incremented by pressing the MENU+ key, and decremented by pressing the MENU- key (the last displayed setting is applied). Pressing the BACK key determines the setting, restoring the view of step 2. Repeat step 3 as necessary.

TEST PATTERN
1

Display	Set Value	Function
PRINT EXECUTE	—	Starts printing at the press of the ENTER key, and ends the printing at the press of the CANCEL key. (Page basis)
TEST PATTERN	0	0: Prints a blank page. 1 to 7: (Print a pattern). 8 to 15: Print a blank page.
CASSET	TRAY1	Selects a unit in which paper is to be loaded.
	TRAY2	When the printer is not equipped with the tray 2, TRAY2 is not displayed.
	FF	
PAGE	0000	Sets the number of test pages printed.
COLOR	ON	Selects color or monochrome printing.
	OFF	
DUPLEX	2 PAGES STACK	Performs two-page stack duplex printing.
	OFF	Establishes duplex-off printing.
	1PAGES STACK	Performs one-page stack duplex printing.

- Values in shaded areas are initial settings. Values established are applicable only to this test mode (they are not written into EEPROM).

Notes!

PAGE Setting ..... Should the ONLINE key be pressed after a digit is shifted by a touch of the MENU+ or MENU- key, the setting is incremented. In the event of the press of the CANCEL key after such a digit shift, the setting is decremented.

COLOR Setting ..... While the COLOR setting is set to ON, pressing the ENTER key displays the following on the panel.

Print Setting for Colors ... The press of the MENU+ or MENU- key shifts a value. The ONLINE or CANCEL key is used for switching between ON and OFF. The BACK key restores original display.

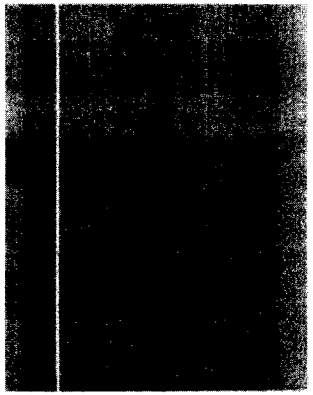
COLOR	→	Y:ON M:ON
ON		C:ON K:ON

4. With "PRINT EXECUTE" on the lower display after step 2, when the ENTER key is pressed, test printing is executed using the values set in steps 2 and 3. Pressing the CANCEL key stops the test printing.

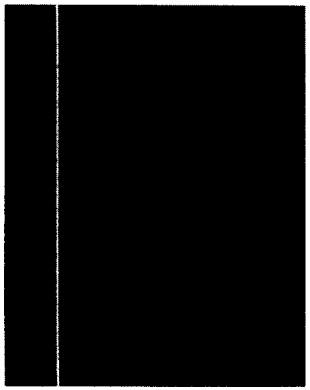
   When alarms shown in the table of operator panel display description (see below) are detected during the initiation or progression of test printing, the printing is suspended (see section 3.1.2.9 Operator Panel Display for the description of errors).

Print Patterns

Patterns 0 and 8 to 15 ... print a blank page.

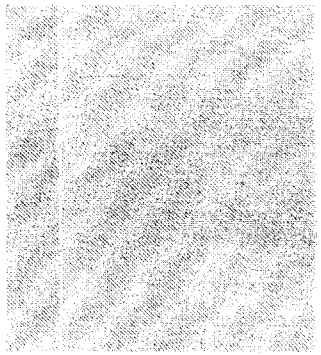


Pattern 1

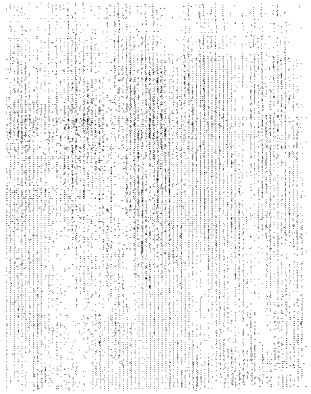


Pattern 2

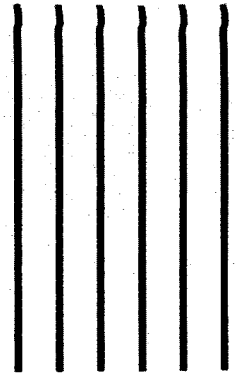
Pattern 3



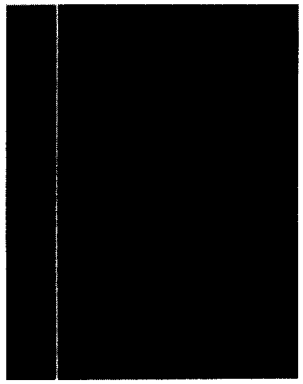
Pattern 4



Pattern 5



Pattern 6



Pattern 7

- The following messages are showing during printing.

P=***
W=***

P: Number of test pages printed (prints)
W: Wait time for printing (in seconds)

- Use the MENU+ key to change the display.

T=*** U=***[***]
H=***% B=***[***]

T: Environment temperature measurement [Setting] (in Celsius)
U: Heater temperature measurement [Setting] (in Celsius)
H: Environment humidity measurement [Setting] (in percent)
B: Belt humidity measurement [Setting] (in Celsius)

- With the press of the MENU+ key, the display is changed.

KTR=*.*** YTR=*.***
MTR=*.*** CTR=*.***

YTR, MTR, CTR and KTR are colors' respective transfer voltage settings (in KV).

- Pressing the MENU+ key changes the display.

KR=**** YR=****
MR=**** CR=****

YR, MR, CR and KR are colors' respective image drum resistance values (in megohms).

- The display is switched by pressing the MENU+ key.

ETMP=*** UTMP=***
REG=**** EXIT=****

ETMP: Environment temperature measurement (in Celsius)
UTMP: Heater temperature measurement (in Celsius)
REG: Hopping motor speed setting
EXIT: Fuser motor speed setting

- The MENU+ key switches the display.

KID=*** YID=***
MID=*** CID=***

KID, YID, MID and CID are image drum motor speed settings.

- Pressing the MENU+ key changes the display.

BELT=****

BELT: Belt motor speed setting

- With the press of the MENU+ key, the display is switched.

HT:**** CH:****
DB:****

HT, CH and DB are high-voltage table IDs.

- Pressing the MENU+ key changes the display.

TR1:**********
TR2:********

TR1 and TR2 are high-voltage table IDs.

5. Repeat steps 2 through 4 if necessary.
6. Press the CANCEL key to end the test (the display is restored to step 1).

3.1.2.6 NVM initialization

The self-diagnosis is used to initialize non-volatile memory.

1. Enter the self-diagnostic (Level 1) mode, press the MENU+ or MENU- key until "NV-RAM INITIAL" appears on the upper display, and press the ENTER key (the MENU+ key is for test item increment, and the MENU- key for test item decrement).
2. A table number to be initialized is showing in the lower display. There are three tables to be initialized. Press the MENU+ or MENU- key until a table number to be initialized shows up (the MENU+ key is for table number increment, and the MENU- key for table number decrement).

NV-RAM INITIAL
TABLE 1

Note! Do not use TABLE 2 and TABLE 3.

3. The upper "NV-RAM INITIAL" starts blinking at the press of the ENTER key and, by holding the key down for ten seconds, all the items in table 3-3 are initialized.
4. Pressing the BACK key ends the test (the display of step 1 is restored).

Table 3-3 (1/2) Initialization Items in TABLE 1

Item to Initialize		Details	Initial Value	Unit
Drum counter	Black Yellow Magenta Cyan	Each initializes that internal count of the color which have been counted after image drum replacement of the color.	0	-
Belt unit counter		Initializes the belt unit internal count after belt unit replacement.	0	-
Fuser unit counter		Initializes the fuser unit internal count after fuser unit replacement.	0	-
Toner counter	Black Yellow Magenta Cyan	Each initializes that internal count of the color which have been counted after recovery from a toner low error of the color.	0	-

Table 3-3 (2/2) Initialization Items in TABLE 2

Item to Initialize		Details	Initial Value	Unit
Color irregularity adjust point X axis	Yellow Magenta Cyan	Each initializes the X-axis correction value for the LED head of the color.	0	1/1200 inch
Color irregularity adjust point Y axis (L)	Yellow Magenta Cyan	Each initializes the Y-axis left-correction value for the LED head of the color.	0	1/1200 inch
Color irregularity adjust point Y axis (R)	Yellow Magenta Cyan	Each initializes the Y-axis right-correction value for the LED head of the color	0	1/1200 inch
Engine parameter		Initializes all the items that have been set using the levels 2 and 3 of Engine Maintenance mode.		

3.1.2.7 Consumable counter display

The self-diagnosis is used to indicate consumable consumption status.

1. After entering the normal self-diagnostic mode, press the MENU+ or MENU- key until "CONSUMABLE STATUS" appears on the upper display, and hit the ENTER key (the MENU+ key is for test item increment, and the MENU- key for test item decrement).
2. By pressing the MENU+ or MENU- key, the consumption status of consumables comes into view item by item (the ONLINE and CANCEL keys are invalid).
3. Pressing the BACK key ends the test (the display of step 1 is restored).

Item	Top Display	Bottom Display	Format	Unit	Details
Fuser unit	FUSER UNIT	******** PRINTS	Decimal	Print	Shows the number of pages printed (prints) after installation of a new fuser unit to date.
Belt unit	TR BELT UNIT	******** PRINTS	Decimal	Print	Shows the number of pages printed (prints) after installation of a new belt unit to date.
ID unit - black	BLACK ID UNIT	******** IMAGES	Decimal	Print	Convert the numbers of revolutions of image drum units after the installation of those units to date into counts on a letter-(A4-) size-page basis at 3 pages per job and show it.
ID unit - yellow	YELLOW ID UNIT	******** IMAGES	Decimal	Print	
ID unit - magenta	MAGENTA ID UNIT	******** IMAGES	Decimal	Print	
ID unit - cyan	CYAN ID UNIT	******** IMAGES	Decimal	Print	
Toner - black	BLACK TONER	***%	Decimal	%	Show the amounts of toner used.
Toner - yellow	YELLOW TONER	***%	Decimal	%	
Toner - magenta	MAGENTA TONER	***%	Decimal	%	
Toner - cyan	CYAN TONER	***%	Decimal	%	

3.1.2.8 Consumable counter display - continuous

The self-diagnosis is used to indicate the consumable life-cycle consumption status of a printer. The status means those count values for consumables which are not initialized even after replacement of the consumables, and is counted without break.

1. Enter the normal self-diagnostic mode, press MENU+ or MENU- key until the upper display "PRINTER STATUS" appears, and press the Enter key (the MENU+ key is for item increment, and the MENU- key for item decrement).
2. When the MENU+ or MENU- key is pressed, the life-cycle consumption status of the consumables shows up item by item (the ONLINE and CANCEL keys are invalid).
3. Pressing the BACK key ends the test (flips the display back to step 1).

Item	Top Display	Bottom Display	Format	Unit	Details
Total sheets fed	TOTAL SHEETS FEED	******** PRINTS	Decimal	Print	Shows the total number of sheets fed, including blank pages.
Print - black	BLACK IMPRESSIONS	******** IMAGES	Decimal	Print	Show the numbers of pages (images) impressed using image drums.
Print - yellow	YELLOW IMPRESSIONS	******** IMAGES	Decimal	Print	
Print - magenta	MAGENTA IMPRESSIONS	******** IMAGES	Decimal	Print	
Print - cyan	CYAN IMPRESSIONS	******** IMAGES	Decimal	Print	

3.1.2.9 Operator panel display

Display

Displayed Message	Description
ONLINE .xxxx tttttt	Indicates the printer is on-line.
OFFLINE .xxxx tttttt	Indicates the printer is off-line.
FILE ACCESSING	Indicates a device access is being performed during charge system operation.
DATA ARRIVE .xxxx tttttt	Indicates data is being received and its processing does not start yet. Mainly displayed during non-character print data PJL processing, or during job spooling.
PROCESSING .xxxx	Indicates data is being received or being output.
DATA .xxxx	Indicates print data remains in the buffer. The printer is waiting for data followed.
PRINTING tttttt	Indicates the printer is printing.
PRINT DEMO PAGE	Indicates the printer is printing demonstration page. Not displayed for printing of user-added demo page(s) (PRINTING is displayed).
PRINT MENU MAP	Indicates the printer is printing menu map.
COLLATE COPY iii/jjj	Indicates multiple copies of a multiple-page document are being printed. iii shows the number of that copy of the multiple copies which is being printed, and jjj the number of copies of the document. When the number of the copies is set to the number 1, PRINTING shown during normal printing is displayed.
COPY kkkk/llll	Indicates copies of a single-page document are being printed. kkkkk shows the number of that copy of the copies which is being printed, and llll the number of copies printed, which is set to the number 1, PRINTING shown during normal printing is displayed.
CANCELING JOB	Indicates the cancellation of a job was instructed and, until the job does not remain, data is being received but being discarded (it is requested that this message be displayed for not less than preset time of seconds because the cancellation is imperceptible due to display for a fraction of a second).
CANCELING JOB (USER DENIED)	Indicates that, as unauthorized, printing was canceled (for job account management): 1. A job was received from a user unauthorized to perform printing. 2. A job was received from a user unauthorized to perform color printing.
CANCELING JOB (BUFFER FULL)	Indicates that, as log memory space internal of the printer was exhausted, a job was canceled. An operation to be specified in such a log full condition is "Job cancelled when log full occurs" (to "CANCEL JOB") (for job account management).

Displayed Message	Description
CANCELING JOB (JAM)	Indicates that, as a paper jam occurred with "JAM RECOVERY" set to OFF, in which case job cancellation is instructed, data is being received but being discarded until job completion.
WARMING UP	Indicates the printer is being warmed up.
OPTIMIZING TEMP	Indicates that, as an image drum stands at a high temperature, printing is temporarily suspended, or indicates a wait state for thermal control in switching paper width from a narrower value to a wider one.
POWER SAVE	Notifies that the printer became in its power save mode. Displayed in combination with another message on the upper display.
ADJUSTING COLOR	Indicates auto color registration adjustment operation is being processed.
ADJUSTING DENSITY	Indicates auto gradation adjustment operation is being processed.
ADJUSTING DENSITY	Indicates auto density adjustment operation is being processed.
ORDER * TONER	Notifies that the toner (Y, M, C or K) is low. Displayed in combination with another message on the upper display. Menu-set "LOW TONER=STOP" makes ATTENTION LED to blink, causing the printer to be placed off-line. With the press of the ONLINE switch, ATTENTION LED becomes illuminated and, until "TONER EMPTY" appears, can stay illuminated.
PRESS ONLINE SW INVALID DATA	Prompts the operator to press the ONLINE switch to clear the warning message, as invalid data was received. Displayed when an unsupported PDL command is received or, without an HDD, a spool command is received.
ORDER * IMAGE DRUM	Notifies (warns) that the image drum (Y, M, C or K) is near end of its life. Displayed in combination of another message on the upper display.
ORDER FUSER	Notifies (warns) that the fuser unit is near end of its life.
ORDER BELT	Notifies (warns) that the belt unit is near end of its life.
FUSER LIFE	Displayed by opening and closing the cover, or turning the printer on, after a first-time fuser life error. A fuser life error occurs again after 500 pages (prints) are output.
BELT LIFE	Displayed by opening and closing the cover, or turning the printer on, after a first-time belt life error. A belt life error occurs again after 500 pages (prints) are output.
* TONER EMPTY	Displayed by opening and closing the cover, or turning the printer on, after a first-time TONER EMPTY error. A TONER EMPTY error occurs again after 50 A4 pages (50 images) are impressed with a 5% density. (For each of Y, M, C and K)
* DRUM LIFE	Displayed by opening and closing the cover, or turning the printer on, after a first-time image drum life error. An image drum life error occurs again after 500 pages (images) are impressed. (For each of Y, M, C and K)

Displayed Message	Description
BELT REFLEX ERROR	A belt reflectance check error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
DENSITY SHUTTER ERROR2	Does not occur at user level (when this occurs, switch the printer to Shipping mode).
DENSITY SHUTTER ERROR1	Does not occur at user level (when this occurs, switch the printer to Shipping mode).
DENSITY COLOR CALIBRATION ERROR	Does not occur at user level (when this occurs, switch the printer to Shipping mode).
DENSITY COLOR SENSOR ERROR	Does not occur at user level (when this occurs, switch the printer to Shipping mode).
DENSITY BLACK CALIBRATION ERROR	Does not occur at user level (when this occurs, switch the printer to Shipping mode).
DENSITY BLACK SENSOR ERROR	Does not occur at user level (when this occurs, switch the printer to Shipping mode).
* IMAGE DRUM SMEAR ERROR	Does not occur at user level (when this occurs, switch the printer to Shipping mode). For each of Y, M, C and K.
* LOW DENSITY ERROR	Does not occur at user level (when this occurs, switch the printer to Shipping mode). For each of Y, M, C and K.
REGISTRATION ERROR 1	A color registration adjustment error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
SENSOR CALIBRATION ERROR	A sensor calibration error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION ERROR 2	A gamma error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION ERROR 3	A gamma error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION ERROR 4	A gamma error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION ERROR 5	A gamma error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION SENSOR ERROR 2	A color registration adjustment sensor error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION SENSOR ERROR 3	A color registration adjustment sensor error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION SENSOR ERROR 4	A color registration adjustment sensor error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
REGISTRATION SENSOR ERROR 5	A color registration adjustment sensor error, which does not occur at user level (when this occurs, switch the printer to Shipping mode).
ttttt EMPTY	Indicates the tray 1 or 2 is empty of paper or removed, accompanied by TRAY1 or TRAY2. This warning is provided until printing from any of the trays is specified. "MP TRAY EMPTY" is displayed, when multipurpose-tray feed is attempted but no paper is loaded in the tray. Opening and closing the cover, or turning the printer on again, releases the warning.

Displayed Message	Description
INVALID ID. JOB REJECTED	Means printing was canceled as unauthorized (for job account management) at reception of any of the following. Cleared by pressing the ONLINE key. 1. A job from a user unauthorized to perform printing. 2. A job from a user unauthorized to perform color printing.
LOAD mmm IN MP TRAY AND PRESS ONLINE SW	Indicates manual printing is requested, and prompts the operator for the manual insertion of the paper mmm.
LOAD mmm/ppp AND PRESS ONLINE SW nnn:ttttt MEDIA MISMATCH	Indicates a mismatch occurred between the type of media in a tray and data to be printed. The loading of the paper mmm/ppp into the tray ttttt is prompted.
LOAD mmm/ppp AND PRESS ONLINE SW nnn:ttttt SIZE MISMATCH	Indicates the size of, or both size and type of, media in a tray did not match data to be printed. The loading of the paper mmm/ppp into the tray ttttt is prompted.
NETWORK INITIAL WAIT A MOMENT	Indicates network initialization is being performed.
LOAD mm nnn:ttttt EMPTY	Indicates printing from the tray 1 or 2 that is empty of paper, or the tray 2 that has been removed is requested, and prompts the operator to replenish the paper mmm in the empty tray.
LOAD mmm AND PRESS ONLINE SW nnn: MP TRAY EMPTY	Indicates multipurpose-tray feed was attempted but paper could not be detected. Loading the paper mmm and pressing the ONLINE key perform printing.
ADD MORE MEMORY nnn: MEMORY OVERFLOW	Indicates a memory capacity overflow caused. Pressing the ONLINE key continues the processing. Expansion RAM must be mounted or the data amount must be reduced.
COLLATE FULL	Indicates memory is full with MOPY data.
REPLACE TONER nnn: * TONER EMPTY	Indicates toner of the color marked with an asterisk (*) (Y, M, C or K) is out. Opening and closing the cover places the printer in the state of warning of such an event, enabling about 50 A4 pages (50 images) to be impressed (such number of pages will be determined later).
CHECK TONER CARTRIDGE nnn: * TONER SENSOR ERROR	Notifies that something wrong with the toner sensor (Y, M, C or K). When the engine is set to Factory mode, service call error display described later is provided.
OPEN FRONT COVER nnn: PAPER SIZE ERROR	Notifies that paper of an inappropriate size was fed from the tray. Paper in the tray or whether multiple sheets were fed must be checked. By opening and closing the cover, the printer performs recovery printing and continues operating.
CHECK MP TRAY nnn: PAPER JAM	Indicates a paper jam occurred.
OPEN FRONT COVER nnn: PAPER JAM	Indicates a paper jam occurred.
OPEN TOP COVER nnn: PAPER JAM	Indicates a paper jam occurred in the paper path.
OPEN DUPLEX COVER nnn: PAPER JAM	Indicates a paper jam occurred at about the duplex unit.

Displayed Message	Description
INSTALL DUPLEX UNIT nnn: DUPLEX UNIT OPEN	Displayed while the duplex unit is removed with paper jammed in the duplex unit. When the duplex unit is removed while paper is not jammed in the duplex unit, the service call error 181 occurs.
REPLACE IMAGE DRUM nnn: * DRUM LIFE	Indicates the image drum (Y, M, C, or K) is at the end of its life. A cover opening and closing operation places the printer in the state of warning of the life end and, after 500 pages (images) are impressed, an image drum life error occurs again.
REPLACE FUSER nnn: FUSER LIFE	Indicates the fuser is at the end of its life. A cover opening and closing operation places the printer in the state of warning of the life end and, after 500 pages (prints) are impressed, a fuser life error occurs again.
REPLACE BELT nnn: BELT LIFE	Indicates the belt is at the end of its life. A cover opening and closing operation places the printer in the state of warning of the life end and, after 500 pages (prints) are impressed, a belt life error occurs again.
REPLACE BELT nnn: BELT LIFE	Indicates the printer is full of waste toner. Only first-time cover opening and closing operation places the printer in the state of warning of such an event and, after 500 pages (images) are impressed, a waste toner full error occurs again.
CHECK IMAGE DRUM nnn: * DRUM MISSING	Indicates the image drum (Y, M or C) is not properly installed.
CHECK IMAGE DRUM & BELT LOCK nnn: K DRUM MISSING	Indicates the belt is not locked or the black drum is not properly installed.
CHECK BELT nnn: BELT MISSING	Indicates the belt unit is not properly installed.
CHECK FUSER nnn: BELT MISSING	Indicates the fuser unit is not properly installed.
CLOSE COVER nnn: COVER OPEN	Indicates the cover is open. TOP (Top cover), FRONT (Front cover). (The sensor cannot identify the upper cover or the front cover. 310 and 311 toggle display appears while either of the covers, or both are open.)
CLOSE COVER nnn: DUPLEX COVER OPEN	Indicates the cover (of the duplex unit) is open.
DOWNLOAD MODE DATA RECEIVE	A download mode used while download data is received during normal operation, which indicates data to be downloaded is being received.
DOWNLOAD MODE DATA RECEIVED OK	Indicates the completion of the reception of data to be downloaded.
DOWNLOAD MODE REC DATA ERROR *	Indicates an error occurred during download data reception processing: 1: Size error. 2: Checksum error. 3: Printer model number error. 4: Module interface version error. 5: FAT version error.
DOWNLOAD MODE DATA WRITING	Indicates download data is being written.
DOWNLOAD MODE DATA WRITTEN OK	Indicates the completion of download data writing.

Displayed Message	Description
DOWNLOAD MODE DATA WRITE ERROR	Indicates an error occurred during download data writing: 1: Memory allocation error. 2: Download file error. 3: Free device memory acquisition error. 4: Insufficient free device memory error. 5: File write error. 6: CU-F/W mismatch error.
POWER OFF/ON nnn: NETWORK ERROR	Indicates a network error occurred.
REBOOTING d	Indicates the printer is being rebooted. "d", a decimal number (one digit), shows the cause of the rebooting: d = 0 ... Cause other than those described below = 1 ... PJL command = 2 ... Menu change = 3 ... Quit operator in PostScript
POWER OFF/ON AND WAIT FOR A WHILE nnn: CONDENSING ERROR	(See the list of service calls)
POWER OFF/ON nnn: FATAL ERROR	(See the list of service calls)
SERVICE CALL nnn: FATAL ERROR	(See the list of service calls)
DOWNLOAD MODE	A downlowd mode activated by turning on the printer while holding the ONLINE switch down, which shows a mode that performs downloading to the printer is established.
DOWNLOAD MODE DATA RECEIVE	Indicates data to be downloaded is being received.
DOWNLOAD MODE DATA RECEIVED OK	Indicates the completion of the reception of data to be downloaded.
DOWNLOAD MODE REC DATA ERROR <No. ***>	Indicates an error occurred during download data reception processing: 001: Size error. 001: Checksum error. 003: Printer model number error. 004: Module interface version error. 005: FAT version error.
DOWNLOAD MODE DATA WRITING	Indicates download data is being written.
DOWNLOAD MODE DATA WRITTEN OK	Indicates the completion of the writing of download data.
DOWNLOAD MODE DATA WRITE ERROR <No. ***>	Indicates an error occurred during download data writing. 011: Memory allocation error. 012: Download file error. 013: Free device memory acquisition error. 014: Insufficient free device memory error. 015: File write error. 016: CU-F interface mismatch error.
INITIALIZING	Indicates the controller end is being initialized.
RAM CHECK **********	Indicates RAM is being checked. An asterisk (*) shows up every after one sixteenth (1/16) of total RAM is checked.

3.1.3 Printing on Printer Equipped with Controller

Menu Map Printing

Printer program versions and controller block configuration, and the other printer configurations and settings are printed.
Operation: (Pressing of Switches)
"MENU+" → "ENTER" → "ENTER"

Demo Printing

Demo patterns for destinations stored in ROM are printed.
Operation: (Pressing of Switches)
"MENU+" → "ENTER" → "MENU+" → "ENTER"

Self-Diagnostic Printing

Self-diagnosis is performed by pressing and holding the test switch of the Ethernet board for two seconds or more and the results of the self-diagnosis are printed.

3.2 Adjustments after Parts Replacement

Adjustments required after parts replacement are described below. The adjustment and correction of color registration must be performed without exception.

Replaced Part	Adjustment
LED Head	Not required.
Image Drum Cartridge (Any of Y, M, C and K)	Not required.
Fuser Unit	Not required.
Belt Cassette Assy	Not required.
PU (RSN Board)	Copying of EEPROM data *Note
CU (ARC Board)	Copying of EEPROM data *Note
Shutter	Setting of correction value for density detection calibration chip
Paper Thickness Sensor Assy	Adjustment of paper thickness detection sensitivity and checking of media thickness detection value

Note: When a PU (RSN board) is replaced with a new one, data may not be read out of its EEPROM. In such cases, color balance must be adjusted.

3.2.1 Notes on Engine Controller Board Replacement

When replacing engine controller boards (RSN PWBs), extract EEPROM data from the boards and copy it onto new boards.
When the operator panel message SERVICE CALL 105 (an engine EEPROM error) appears, engine controller board replacement with a new one is required, where the operation described in section 3.2.2 is to be processed.

3.2.2 Notes on EEPROM Replacement

After EEPROMs are replaced with new ones at the time of engine controller board (RSN PWB) replacement, version read (fuse cut-out) function is disabled. Mode switching by a PJL command from Factory to Shipping must be performed:

1. Enter System Maintenance mode by turning on printer power while holding the MENU+ and MENU- keys down concurrently.
2. User MENU+ key keystrokes until "DIAGNOSTIC MODE" is displayed (a few keystrokes), and press the ENTER key.
3. With "DIAGNOSTIC MODE" on the display, use the ENTER and ONLINE key combination to enter Engine Maintenance mode (level 3).
4. Press the MENU+ or MENU- key until "LOCAL PARAMETER SET" appears on the upper display, and hit the ENTER key.
5. Press the MENU+ or MENU- key until "FACTORY WORKING MODE" is shown, and press the ENTER key.
6. While "FACTORY WORKING MODE" is being displayed, select a value by the ONLINE and CANCEL keys and press the ENTER key.
7. Selecting "SHIPPING MODE" (enables fuse cut-out) and then concurrently pressing the ONLINE and CANCEL keys stop the blinking of the display, storing the value.

Notes! The life data of the parts, such as the belt, toner and image drum units, of a printer is cleared by its EEPROM replacement. Note that an error is introduced in each unit's life count until the unit is next replaced. The following are counts cleared by EEPROM replacement. Errors in counts other than the count of total sheets fed, which counts are cleared at the points where the units corresponding to the counts are replaced with new ones, are resolved at those points.

3.2.3 EEPROM Replacement after ARC Board Replacement

When ARC board replacement, data in user-used board EEPROM is to be copied onto new boards (to allow new boards to inherit user-defined information and font installation information). When user-used EEPROMs are unusable due to its problem, new boards, whose destinations and must have been set, are to be used. Also new-EEPROM destinations must have been set.

3.2.4 Destination Setting (Check Method: Printing demo page)

Destination setting is to be conducted at final setting after part installation in printers. The destination setting for each printer, which defaults to ODA, is to be set to the destination of the printer without exception at the time it is shipped.

Note! Destination settings are stored in TIG board EEPROM.

1. Maintenance-use boards: Destination setting for maintenance-use boards to Japan indirect sales, ODA, OEL and APS is not performed. They are shipped with the destination settings set to their default.
2. Setting from operator panel: Each printer is booted in Maintenance mode and its destination is set.
   - While holding the MENU+ and MENU- keys down, turn on the printer.
   - After "MAINTENANCE MENU" appears, the display changes to "OKIUSER."
   - Press the MENU+ key, select destination-setting "OKIUSER" and press the ENTER key.
   - "JPP*" is shown on the lower display.
   - Press the ENTER key, select a destination using the MENU+ or MENU- key, and hit the ENTER key.
   - Press the BACK key to confirm the selection.
   - Re-starting the printer changes its destination.
3. Description
   PX714/715 printers to Japan domestic and overseas destinations share a ROM. Destination setting must be performed where the ROM is used in printers to other-than-ODA destinations (destination settings default to ODA). Destination settings are stored in ARC board EEPROM. Program ROM version changes return destination settings to their initial values. Destination setting for maintenance-use boards, which destinations are not set at the time of shipment, is to be carried out when they are used.

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3.3 Print Density Adjustment

Auto Density Adjustment mode is set to [ÉWÉhÉE(AUTO)] at printer shipment, which may cause print density to be out of its appropriate balance during printer operation. In such cases, the density is to be adjusted.

Notes! Print density adjustment is to be performed with printers at rest. Do not adjust print density during printer warming-up.

1. Press the MENU+ or MENU- key several times to show [ÉJÉâÅ[ÉÅÉjÉÖÅ[(COLOR MENU)], and press the ENTER key.
2. Press the MENU+ or MENU- key to display [ÉmÉEÉh ÉzÉZÉC/ÉWÉbÉRÉE (DENSITY ADJUSTMENT/ RESET)].
3. Press the ENTER key.

Auto print density adjustment starts.

3.4 Paper Thickness Detection Adjustment and Media Thickness Detection Value Checking

Print Density Input to Print Density Detection Calibration Chip

1. Each PU is to be programmed with a calibration target correction value (the last two characters of barcode information, about which see the illustration shown below) that is a shutter label marking.

With shutter, sheet color, print density sensor or PU board replacement, correction value reprogramming must be performed.

Setting from operator panel:

- While holding the MENU+ and MENU- keys down, turn the printer on.
- After "MAINTENANCE MENU" appears, the display changes to "OKIUSER."
- Press the MENU+ key seven times to select "DIAGNOSTIC MODE."
- Press the MENU+ and ONLINE key. "ENGINE DIAG LEVEL2" is displayed.
- Press the MENU key two times to select "ENGINE PARAMETER SET."
- Press the ONLINE or CANCEL key to show "CHIP DISPERSION ADJUST 00H."
- Pressing the ENTER key blinks the first or second character of the display.
- Press the ONLINE or CANCEL key to set a correction setting.
- Press and hold the ONLINE or CANCEL key about two seconds to confirm the correction setting. The blinking correction setting becomes stay illuminated, bearing with an asterisk (*).
- The printer restarts and the correction setting takes effect.

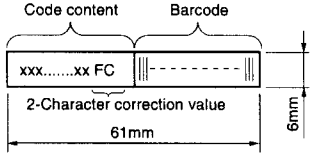
Barcode specifications

① Code: code39

② Number of barcode characters

③ Information written

From left: One asterisk (*) character
Four-digit date (ID barcode) system
One-digit year (only one-digit x of 200x)
One-digit month (X, Y and X, for Oct., Nov. and Dec.)
Two-digit day
Four digits Filled with zeros 0000
Two-digit correction value
(In the same format as that for data manually input to printer)
00 to 04, for 0 to 4. FF to FC, for -1 to -4.



④ Barcode Dimensions

YC4116-1006P001 label sheet 1/4"

4. REGULAR MAINTENANCE

4.1 Parts Replaced Regularly

Users are recommended to replace parts periodically according to the table below. (Print quality cannot be assured and damages may occur, when the parts are not replaced.)

Part Name	Time of Replacement	Condition for Replacement	Adjustment (after replacement)
Toner cartridge	When [FILL TONER] is displayed.	5,000 pages are printed.	
ID	When [DRUM LIFE] is displayed.	15,000 pages are printed. (3P/J)	
Fuser unit	When [FUSER LIFE] is displayed.	45,000 pages are printed.	
Belt unit	When [BELT LIFE] is displayed.	50,000 pages are printed.	

Parts are replaced periodically by users.

4.2 Cleaning

Clean the internal and external sections of the printer with waste and a small vacuum cleaner as required.

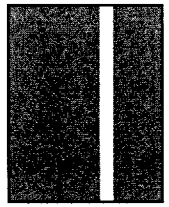
Note: Do not touch the image drum terminals, the LED lens array, and the LED head connecter.

4.3 Cleaning the LED Lens Array

Clean the LED head array while white bands or lines (white-out, faint print) appear in the vertical direction on a printed page.

Note: Be sure to clean the LED lens array with the LED lens array cleaner. (the LED head cleaner is packed together with the toner cartridge.)

White band, white stripe
(Void or light printing)



4.4 Cleaning the Pick-up Roller

Clean the pick-up roller if lines appear in the vertical direction on the printed page.

Note: Use a soft cloth in order to avoid scratching the roller surface.

5. TROUBLESHOOTING PROCEDURES

5.1 Precautions before troubleshooting

(1) Confirm the basic inspection items described in the user manual.

(2) Obtain as much information regarding the problem from the user as possible.

(3) Check the printer in a condition close to that upon generating the problem.

5.2 Precautions before handling an abnormal image

(1) Confirm that the environment for using this printer is appropriate.

(2) Confirm that consumables (toner, drum cartridge) are replaced appropriately.

(3) Confirm that paper is accurate. Refer to paper specifications.

(4) Confirm that the drum cartridge is set appropriately.

5.3 Precautions upon handling an abnormal image

(1) Do not touch or allow foreign objects to contact the OPC drum surface.

(2) Do not expose the OPC drum to direct sunlight.

(3) Do not touch the fuser unit as it is heated significantly.

(4) Do not expose the image drum to light for longer than five minutes in room temperature.

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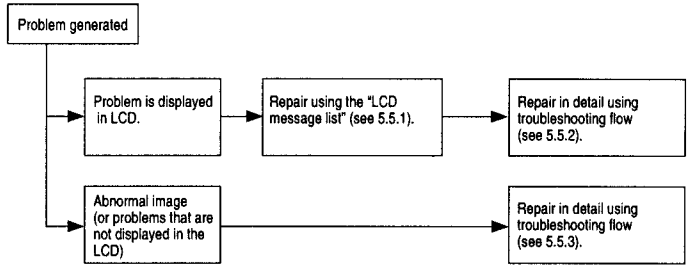
5.4 Preparing for Troubleshooting

(1) Operator panel display

Problems that occur with the printer are indicated in the LCD.
Apply proper remedies according to the message indicated in the LCD.

5.5 Troubleshooting Procedure

Confirm the problem in the following method when the printer generates a problem.


Problem generated
Problem is displayed in LCD.
Repair using the "LCD message list" (see 5.5.1).
Repair in detail using troubleshooting flow (see 5.5.2).
Abnormal image (or problems that are not displayed in the LCD)
Repair in detail using troubleshooting flow (see 5.5.3).

5.5.1 LCD message list

When the printer detects a non-recoverable error, the following service call error is displayed in the LCD.

Service call
nnn: error

Note: nnn is an error code.

When [Service call] is displayed, error information that corresponds to the error code appears in the bottom line in the LCD. Error codes, their definitions and remedies are described in Table 5-1-1.

Table 5-1-1 Operator Alarm (1/6)

Table 5-1-1 Operator Alarm (2/6)

Table 5-1-1 Operator Alarm (3/6)

Table 5-1-1 Operator Alarm (4/6)

Table 5-1-1 Operator Alarm (5/6)

Table 5-1-1 Operator Alarm (6/6)

5.5.2 Preparing for troubleshooting

(1) Operator panel display
Problems that are generated in this device are indicated in the LCD.
Apply proper measures according to the message displayed in the LCD.

No.	Problem	Flow Chart No.
1	Printer Malfunction after Turn-on.	①
2	Jam Errors Paper Loading Jam (1st tray) Paper Loading Jam (Multipurpose tray) Paper Feed Jam Paper Exit Jam Duplex Print Jam	 ②-1 ②-2 ②-3 ②-4 ②-5
3	Paper Size Error	③
4	Image Drum Up/Down Operation Error	④
5	Fuser Unit Error	⑤
6	Motor Fan Error	⑥

Note: When replacing engine boards (RSN PWBs), read in the EEPROM chip data from the boards and copy it onto installed new boards.

(2) CU assembly troubleshooting

No operation

Is an error message displayed?

- YES Perform according to the error message.
- NO Is black displayed in the top and bottom lines of the operator panel LCD?
  - NO Check the power supply voltage: 3.3V to pins 4 and 5, and 5V to pins 7 and 8, of RSN PWB CUIF connector.
    - NO Replace the power supply.
    - YES Check the PU board and operator panel board.
  - YES Is ROM DIMM A set properly?
    - NO Set a program DIMM to ROM DIMM A properly.
      If the error is not recovered, replace the CU board.
    - YES Replace the CU board.
      Remove EEPROM from the old board and install it on the new board.

① The printer does not operate properly after it is turned on.

- Turn the printer off and on again.
- Does ■■■■■■■■■■■■ appear (for about one second)?
  - NO Is the AC cable connected properly?
    - NO Connect the AC cable properly.
  - YES Is +5V being output to the operator panel connector (OPE connector) on the engine board (RSN PWB)?
    Pin 4: +5V. Pin 7: 0V.
    - YES Is +5V being output to the connector CN1 on the OPE board (RSP PWB)?
      Pin 4: +5V. Pin 7: 0V.
      - NO Replace the OPE board.
      - YES Is the operator panel cable connected properly?
        - NO Connect the cable properly.
        - YES Replace the operator panel cable. Has the printer recovered from the error?
          - NO Replace the operator panel cover assy.
          - YES End.
  - NO Is +5V being output to the POWER connector on the engine board (RSN PWB)?
    Pins 7 to 9: +5V. Pins 1 to 3, and 13 to 17: 0V.
    - NO Replace the low voltage power unit after checking the connection of the POWER connector.
  - YES Replace the engine board.
- YES Are the following voltages being output to the CU board PUIF connector?
  Pins 7 and 8: +5V. Pins 4 and 5: +3.3V. Pins 1, 2, 3 and 6: 0V.
  - YES Replace the CU Board.
- NO Are the following voltages being output to the POWER connector on the engine board?
  Pins 7 to 9: +5V. Pins 10 to 12: +3.3V. Pins 4 to 6: +24V. Pins 1 to 3, and 13 to 17: 0V.
  - YES Replace the engine board.
- NO Replace the low voltage power unit.

②-1 Paper Loading Jam (1st tray)

- Does a paper loading jam occur immediately after the printer is turned on?
  - YES Is paper jammed at the entrance cassette sensor or the entrance multipurpose-tray (MPT) sensor?
    - YES Remove the jammed paper.
    - (A)
  - NO Do the entrance cassette sensor lever and the entrance MPT sensor lever move properly?
    - NO Replace defective sensor lever(s).
  - YES Do the sensors operate properly? [Operate each sensor lever to check the signals on FSNS connector pins of the engine board (RSN PWB)]. Pin 4: Entrance cassette sensor, Pin 2: Entrance MPT sensor.
    - NO Replace the front sensor board (RSF PWB) after checking signal cable connection.
  - YES Replace the engine board after checking signal cable connection.
- NO Does a paper loading jam occur moments after paper is drawn into the printer?
  - YES Has paper reached the entrance cassette sensor or the entrance multipurpose-tray (MPT) sensor?
    - YES Go to (A).
  - NO Replace the feed roller or the paper cassette's paper separation frame assy.
- NO Is the 1st hopping motor running?
  - YES Replace the feed roller or the paper cassette's paper separation frame assy.
- NO Does the 1st hopping motor have a rated resistance (approx. 3.5Ω)?
  - NO Replace the 1st hopping motor.
- YES Is 24V being output to the fuse F2 on the engine board?
  - NO Replace the low voltage power unit.
- YES Replace the engine board after checking gear engagement and cable connection.

②-2 Paper Loading Jam (Multipurpose tray)

- Does a paper loading jam occur immediately after the printer is turned on?
  - YES Is paper jammed at the entrance cassette sensor or the entrance multipurpose-tray (MPT) sensor?
    - YES Remove the jammed paper.
    - (A)
  - NO Does the entrance MPT sensor lever move properly?
    - NO Replace the lever.
  - YES Does the entrance MPT sensor work properly? [Operate the entrance MPT sensor lever to check, through the switch scan test of System Maintenance mode, the sensor for proper working, or to check the signal on a corresponding FSNS connector pin of the engine board (RSN PWB).] Pin 3: Entrance MPT sensor
    - NO Replace the front sensor board (RSF PWB) after checking signal cable connection.
  - YES Replace the engine board after checking signal cable connection.
- NO Does a paper loading jam occur at the instant after paper is drawn into the printer?
  - YES Has paper reached the entrance multipurpose-tray (MPT) sensor?
    - YES Go to (A).
  - NO Replace the multipurpose tray assy.
- NO Is the hopping motor running?
  - NO Is +24V being output to the fuse F2 on the engine board?
    - NO Replace the low voltage power unit.
  - YES Replace the engine board after checking cable connection.
- YES Replace the engine board after checking cable connection.

②-3 Paper Feed Jam

Does the printer have a paperfeed jam immediately after it is turned on?

- YES Is paper jammed at the entrance write sensor?
  - YES Remove the jammed paper.
  - (A)
- NO Does the entrance write sensor lever move properly?
  - NO Replace the lever.
- YES Does the entrance write sensor work properly? [Operate the sensor lever to check the signal on a corresponding FSNS connector pin of the engine board (RSN PWB)]. Pin2: Entrance belt sensor
  - NO Replace the front sensor board (RSF PWB) after checking cable connection.
- YES Check signal cable connection. Is it proper?
  - NO Establish proper connection.
- YES Replace the engine board.

NO Does the printer have a paperfeed jam immediately after the printer draws paper into it?

- YES Has paper reached the entrance write sensor?
  - YES Go to (A).
- NO Is the hopping motor running?
  - NO Does the hopping motor have a rated resistance (approx. 3.5Ω)?
    - NO Replace the registration motor.
  - YES Replace the engine board after checking gear engagement.
- YES Replace the registration roller A or B.

NO Does a paperfeed jam occur during paper loading?

- YES Is the belt motor running?
  - NO Does the belt motor have a rated resistance (approx. 3.5Ω)?
    - NO Replace the belt motor.
  - YES Is 24V being output to the DRIVER connector pin 1 on the engine board?
    - NO Replace the engine board.
  - YES Replace the engine board after checking gear engagement.
- YES Replace the belt cassette assy after checking gear engagement.

NO End

②-4 Paper Exit Jam

Does a paper exit jam occur immediately following the printer is turned on?

- YES Is paper jammed at the exit sensor?
  - YES Remove the jammed paper.
- NO Does the paper exit sensor lever move properly?
  - NO Replace the lever.
- YES Does the paper exit sensor work properly? [Operate the paper exit sensor lever to check, through the switch scan test of System Maintenance mode, the sensor for proper working, or to check the signal on the DRIVER connector pin 8 on the engine board (RSN PWB).]
  - NO Replace the paper exit sensor after checking signal cable connection.
- YES Replace the driver board.

NO Is the face-up stacker cover completely open or closed?

- NO Completely open or close the cover.

YES Is the heat motor running?

- NO Does the heat motor have a rated resistance (approx. 6.0Ω)?
  - NO Replace the heat motor.
- YES Is 24V being output to the DRIVER connector pin 1 on the engine board?
  - NO Replace the engine board.
- YES Replace the driver board after checking cable connection.

YES Does the exit guide assy work properly?

- NO Replace the exit guide assy.

YES Replace the engine board.

②-5 Duplex Print Jam

- Does a paperfeed jam occur at the instant following the printer is turned on?
  - YES Does paper exist in the duplex unit?
    - YES Remove the jammed paper.
    - (A)
  - NO Do the duplex-in sensor, rear sensor and front sensor levers move properly?
    - NO Replace problem sensor lever(s).
  - YES Do the duplex-in, rear and front sensors function properly? (Through the switch scan test of System Maintenance mode, check the sensors are placed at the paper absence detection level.)
    - NO Replace malfunctioned sensor(s) after checking cable connection.
  - YES Check the signal cable connection. Is it proper?
    - NO Establish proper connection.
  - YES Replace the duplex controller board (V7X PWB).
- NO Does a paperfeed jam occur moments after paper is drawn into the printer?
  - YES Has paper reached the duplex rear sensor?
    - YES Proceed to (A).
  - NO Is the duplex motor running?
    - NO Does the duplex motor have a rated resistance (approx. 6.0Ω)?
      - NO Replace the duplex motor.
    - YES Replace the duplex board (V7X PWB) after checking gear engagement.
  - YES Replace the registration roller A or B.
- NO Replace the duplex unit.

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③ Paper Size Error

- Is proper size paper being used?
  - NO Use proper size paper.
- YES Is paper jammed at the entrance multipurpose tray (MPT) sensor?
  - YES Remove the jammed paper.
- NO Does the entrance MPT sensor lever move properly?
  - NO Replace the lever.
- YES Does the entrance MPT sensor work properly? (Operate the entrance MPT sensor lever to check the signal on a corresponding FSNS connector pin on the engine board RSN PWB.) Pin 2: Entrance MPT sensor
  - NO Replace the sensor board (RSF PWB) after checking cable connection.
- YES Does the entrance write sensor lever move properly?
  - NO Replace the lever.
- YES Does the entrance write sensor work properly? (Operate the entrance write sensor lever to check, through the switch scan test of System Maintenance mode, the sensor for proper operation. The signal on a corresponding FSNS connector pin of the engine board (RSN PWB) is to be checked.) Pin 3: Entrance write sensor
  - NO Replace the sensor board (RSF PWB) after checking cable connection.
- YES Replace the engine board after checking cable connection.

④ Image Drum Unit (ID) Up/Down Operation Error

- Power the printer off and, after a few seconds, on again.
- Are all the ID drums properly revolving during printing?
  - NO Do non-revolving-ID motors have a rated resistance (approx. 3.5Ω)?
    - NO Replace defective motor(s).
    - YES Is 24V being output to the F1 and F2 of the engine board?
      - NO Replace the low voltage power unit.
      - YES Replace the engine board after checking cable connection.
  - YES Do the ID sensors work properly? (Check the signals on the high voltage power unit CN3, pin 2.)
    Signal level on light reflected : 5V
    Signal level on light shielded : 0V
    - NO Replace the high voltage power unit.
    - YES Replace the engine board after checking the cable connection between the high voltage power unit and the engine board (RSN PWB)

⑤ Fuser Unit Error

- Does a fuser unit error occur immediately after the printer is turned on?
  - (A)
  - YES Is the heat roller thermistor broken or short-circuited (see figure 5-1)? (approx. 190 k to 980 kΩ at room temperatures of 0 to 43°C)
    - YES Replace the fuser unit.
    - NO
  - NO Does a fuser unit error occur about one minute after printer is turned on?
    - NO Go to (A).
  - Is the heater of the fuser unit on (Is it hot)?
    - YES Replace the engine board. Has the problem been corrected?
      - YES End.
      - NO Replace the fuser unit.
  - NO Is AC voltage being output between the low voltage unit CN1 connector pins 1 and 3?
    - NO Replace the low-voltage power unit. Has the problem been corrected?
      - YES End.
      - NO Replace the engine board.
  - YES Replace the fuser unit.

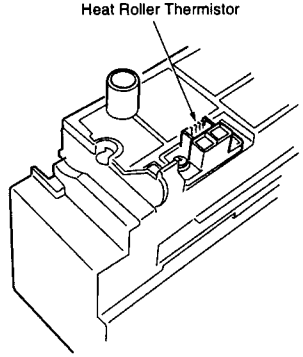


Figure 5.1

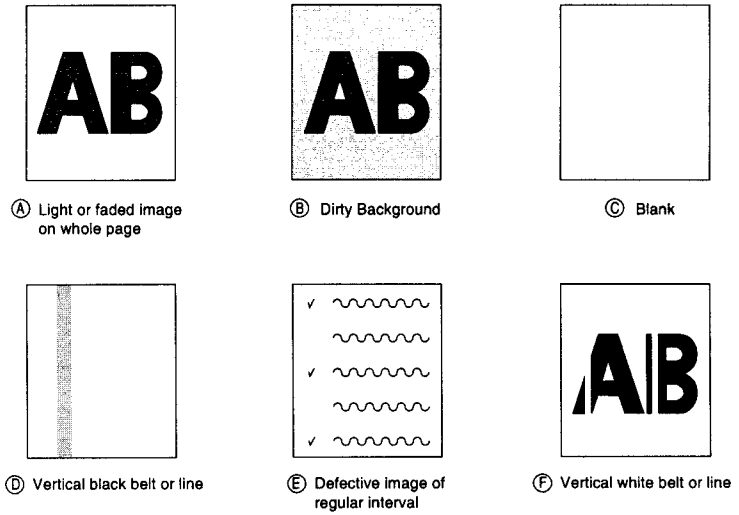
⑥ Motor Fan Error

- Does the low voltage power supply fan run after the printer is turned on?
  - NO Is 24V being output to the POWER connector on the engine board (RSN PWB)? 24V: Pins 4, 5 and 6
    - NO Replace the low voltage power unit after checking cable connection.
  - YES Has the low voltage power unit fan replaced?
    - YES End.
  - NO Replace the low voltage power unit fan.
- YES Does the high voltage power unit fan rotate after the printer is turned on again?
  - NO Is 24V being output to the fuse 3 on the engine board (RSN PWB)?
    - NO Is 24V being output to the POWER connector on the engine board (RSN PWB)? 24V: Pins 4, 5 and 6
      - NO Replace the low voltage power unit after checking cable connection.
    - YES Replace the engine board.
  - YES Replace the high voltage power unit fan.
- YES End.

5.5.3 Image Problem Troubleshooting

When printout images are not satisfactory as illustrated below, follow the troubleshooting steps listed below.

Abnormal Image	Flowchart No.
Light or faded image, or color misalignment, on whole page (Figure 5.2-Ⓐ)	①
Dirty background (Figure 5.2-Ⓑ)	②
Blank page (Figure 5.2-Ⓒ)	③
Vertical belt or line (black or color) (Figure 5.2-Ⓓ)	④
Vertical belt or line (white or uneven-color) (Figure 5.2-Ⓕ)	⑤
Poor fusing (ink spreads or peels when touched with fingers.)	⑥
Defective image of regular interval (Figure 5.2-Ⓔ)	⑦
Missing image	⑧
Color misalignment	⑨
Color different from original one	⑩



Ⓐ Light or faded image on whole page
Ⓑ Dirty Background
Ⓒ Blank
Ⓓ Vertical black belt or line
Ⓔ Defective image of regular interval
Ⓕ Vertical white belt or line

Figure 5.2

① Light or faded image, or color misalignment, on whole page (Fig 5-2 Ⓐ)

Is toner running short (Is TONER LOW displayed)?

YES Supply toner.

NO Is proper paper being used?

NO Use proper paper.

YES Are the LED head lenses dirty?

YES Clean dirty lens(es).

NO Are the LED head assys all connected to the CU board (ARC PWB) properly?

NO Connect the cable(s) between not properly connected LED head(s) and the engine board correctly.

YES Are +5V and +3.3V being output from the CU board (ARC PWB) to the LED head assys?
+3.3V: 14
+5V: 16, 18, 29, 22 and 24

NO Replace the CU board (ARC PWB).

YES Replace the LED head assys after checking cable connection. Has the problem been corrected?

YES End.

NO Be sure cable connection is established. Is 24V being output to the POWER connector on the engine board (RSN PWB)?
+24V: Pins 4, 5 and 6

NO Replace the low voltage power unit after checking cable connection.

YES Is 5V being output to the engine board (RSN PWB) CUIF connector pins 7 and 8?

NO Replace the engine board.

YES Replace the high voltage power unit or the belt cassette assy after checking cable connection. Has the problem been corrected?

YES End.

NO Are the image drum unit pins connected to the contact assy properly (see figure 5-2)?

NO Connect not properly connected image drum unit(s) to the contact assy correctly.

YES Replace the image drum units.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

② Dirty background (Fig. 5-2 Ⓑ)

Were the image drums exposed to external light for a long time?

YES Replace exposed image drum unit(s).

NO Are the rollers of the fuser unit dirty?

YES Replace the fuser unit.

NO Is the PAPER THICKNESS set correctly?
Medium: 64 to 74 g/m^2. Medium Heavy: 75 to 104 g/m^2. Heavy: 105 to 120 g/m^2.
Ultra Heavy: 121 to 203 g/m^2. Transparency.

NO Set the PAPER THICKNESS correctly.

NO Are the LED head assys connected to the CU board (ARC PWB) properly?

NO Connect not properly connected LED head assy(s) to the CU board (ARC PWB) correctly.

YES Are +5V and +3.3V being output to the CU board (ARC PWB) K, Y, M and C LED HEAD connector pins?
+3.3V: 14
+5V: 16, 18, 20, 22 and 24

NO Replace the CU board (ARC PWB).

YES Replace the LED head assys after checking cable connection. Has the problem been corrected?

YES End.

NO Make sure cable connection is made. Is 24V being output to the engine board (RSN PWB) POWER connector?
+24V: Pins 4, 5 and 6

NO Replace the low voltage power unit after checking cable connection.

YES Replace the engine board. Has the problem been corrected?

YES End.

NO Replace the high voltage power unit or the belt cassette assy after checking cable connection. Has the problem been resolved?

YES End.

NO Be sure cable connection is established. Are the pins of the image drum units connected to the contact assy properly (see figure 5-3)?

NO Connect not properly connected pin(s) to the contact assy correctly.

YES Replace the image drum units.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

③ Blank page (Fig 5-2 Ⓒ)

Are the LED head assys connected to the CU board (ARC PWB) properly?

NO Check the cable connection between not properly connected LED assy(s) and CU board (ARC PWB), and connect them correctly.

YES Are +5V and +3.3V being output to the CU board (ARC PWB) K, Y, M and C HEAD connector pins?
+5V: Pins 16, 18, 20, 22 and 24
+3.3V: Pin 14

YES Replace the LED head assys after checking cable connection.

NO Are +5V and +3.3V being output to the engine board (RSN PWB) CUIF connector?
+5V: Pins 7, 8 and 9
+3.3V: Pins 10, 11 and 12

NO Replace the low voltage power unit after checking cable connection.

YES Is 24V being output to the engine (RSN PWB) HVOLT connector pin 15?

NO Replace the engine board.

YES Replace the high voltage power unit or the belt cassette assy after checking cable connection. Has the problem been corrected?

YES End.

NO Are the image drum pins connected to the contact assy properly (see figure 5-2)?

NO Connect not properly connected image drum pin(s) to the contact assy correctly.

YES Replace the image drum units.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

④ Vertical belt or line (black or color) (Fig. 5-2 Ⓓ)

Connect not properly connected LED head assy(s) to the CU board correctly.

NO Connect the LED head assembly to the connection board properly.

NO Is the pin connection of the image drum unit(s) to the contact assy proper (see figure 5-3)?

NO Connect not properly connected pin(s) to the contact assy correctly.

YES Replace the image drum unit(s).

YES Replace the LED head assys after checking cable connection. Has the problem been corrected?

YES Replace the high voltage belt unit.

NO Replace the CU board (ARC PWB) after checking cable connection. Has the problem been resolved?

YES End.

NO Is the engine board (RSN PWB) connected to the CU board (ARC PWB) properly?

NO Connect the engine board to the connection board correctly.

YES Replace the engine board (RSN PWB) after checking cable connection. Has the problem been corrected?

YES End.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

⑤ Vertical belt or line (white or uneven-color) (Fig. 5-2 Ⓕ)

- Are the LED heads dirty?
  - YES: Clean dirty LED head(s).
  - NO: Are the image drum pins connected to the contact assy properly (see figure 5-3 D)?
    - NO: Connect not properly connected pin(s) to the contact assy correctly.
    - YES: Replace the image drum units.
- NO: Are the LED head assys connected to the CU board (ARC PWB) properly?
  - NO: Connect not properly connected LED head assy(s) to the CU board (ARC PWB) correctly.
  - YES: Replace LED head assys after checking cable connection. Has the problem been corrected?
    - YES: End.
    - NO: Replace the high voltage belt unit. Has the problem been corrected?
      - NO: End.
      - NO: Replace the connection board (Y73 PWB) after checking cable connection. Has the problem been resolved?
        - YES: End.
        - NO: Is the I/D terminal connected properly to the contact assembly? (See Fig. 5-3)
          - NO: Is the engine board (RSN PWB) connected to the CU board properly?
          - YES: Replace the engine board (RSN PWB) after checking cable connection. Has the problem been corrected?
            - YES: End.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

⑥ Poor fusing (Ink spreads or peels when touched lightly with fingers.)

- Is proper paper being used?
  - NO: Use proper paper.
- YES: Are the contact of the fuser unit connected properly?
  - NO: Connect the contact of the fuser unit properly.
- YES: Are the rollers of the fuser unit dirty?
  - YES: Replace the fuser unit assy.
- NO: Is the PAPER THICKNESS (menu 1) set properly?
  Medium: 64 to 74 g/m^2. Medium Heavy: 75 to 104 g/m^2. Heavy: 105 to 120 g/m^2.
  Ultra Heavy: 121 to 203 g/m^2. Transparency.
  - NO: Set the PAPER THICKNESS correctly.
- YES: Is AC voltage being output between the CN connector pins 1 and 3 of the low voltage power unit?
  - NO: Replace the low voltage power unit.
- YES: Does the heat roller thermistor have a rated resistance (approx. 180 k to 980 kΩ at room temperatures of 0 to 43°C) (see figure 5-1)?
  - NO: Replace the fuser unit.
- YES: Does the fuser temperature agree with its specification? Check the fuser temperature on the LCD display of Engine Maintenance mode. Heat Roller: 145 to 155°C) (5 FH to 6 BH)
  - NO: Replace the fuser unit assy.
- YES: Replace the fuser unit assy.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

⑦ Defective image of regular interval (Figure 5.2-Ⓔ)

Interval	Problem	Troubleshooting
94.2 mm	Image Drum	Replace the image drum unit.
50.24 mm	Developing Roller	Replace the image drum unit.
47.10 mm	Toner Supply Roller	Replace the image drum unit.
37.68 mm	Charging Roller	Replace the image drum unit.
85.41 mm	Fuser Upper Roller	Replace the fuser unit.
87.92mm	Fuser Lower Roller	Replace the fuser unit.
50.24mm	Transfer Roller (K)	Replace the belt unit.
43.96mm	Transfer Roller (Color)	Replace the belt unit.

Note: The life counts of the image drum units, fuser unit and belt unit are automatically reset at their respective replacements.

⑧ Missing image

Are the LED heads dirty?

YES Clean dirty LED head(s).

NO Are the LED head assys connected to the CU board (ARC PWB) properly?

NO Check the connection cables between not properly connected LED head(s) and the CU board, and connect them correctly.

YES Are +5V and +3.3V being output to the following HEADPOW connector pins of the CU board (ARC PWB)?
+5V: Pins 16, 18, 20, 22 and 24
+3.3V: Pin 14

YES Is +5V being output from the CU board (ARC PWB) to the LED heads?

NO Replace the CU board (ARC PWB).

YES Replace the LED head assys after checking cable connection. Has the problem been resolved?

NO Replace the driver board (RSM PWB) after checking cable connection. Has the problem been corrected?

YES End.

NO Is 24V being output to the POWER connector on the engine board (RSN PWB)?
+24V: Pins 2, 4, and 6

NO Replace the low voltage power unit after checking cable connection.

YES Is 24V being output to the HVOLT connector pin 15 of the engine board (RSN PWB)?

NO Replace the engine board.

YES Replace the high voltage power unit or the belt cassette assy after checking cable connection.

YES End.

NO Are the pins of the image drum units are connected to the contact assy properly (see figure 5-3)?

NO Connect not properly connected pins to the contact assy correctly.

YES Replace the image drum units.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

⑨ Color misalignment

"TONER LOW" is showing on the display.

YES Supply toner. Has the problem been resolved?

YES End.

NO Conduct a color registration test of Engine Maintenance mode.
Procedure: Enter the self-diagnostic mode (level 1) of Engine maintenance mode.

DIAGNOSTIC MODE
XX.XX.XX

Press the MENU+ and ONLINE keys to enter the self-diagnostic mode (level 2).

ENGINE DIAG LEVEL2

Pressing the MENU+ key three times displays "REG ADJUST TEST."

REG ADJUST TEST

Press the ENTER key once to show "REG ADJUST EXECUTE."

REG ADJUST EXECUTE

Press the ENTER key to execute auto color registration adjustment (the motor starts running and color registration adjustment is performed).

Has the symptom that the color registration adjustment operation is not performed (the motor does not run) and "OK" is immediately displayed occurred?

YES An other-than-color-misalignment error occurred. Correct the error. Has the color misalignment resolved?

YES End.

(A)

(A)

NO Is "NG CALIBRATION LEFT/RIGHT" displayed?

YES Is the color registration sensor cover dirty?

YES: A malfunction of the sensor cover front surface cleaning operation of the cleaning blade placed on the back of the shutter occurred. Replace the shutter and the sensor cover to restore cleanability.

NO Make sure of color registration sensor board (Z71 PWB) connector, and engine board (RSN PWB) RSNS and PUIF connector connections. Has the problem been corrected?

YES End.

NO Replace the driver board. Has the problem been resolved?

YES End.

NO Replace the engine board. Has the problem been resolved?

YES End.

NO Replace the color registration sensor board and driver board connection cable. Has the problem been corrected?

YES End.

NO Replace the driver board and PU connection cable. Has the problem been resolved?

YES End.

NO Is "DYNAMICRANGE LEFT/RIGHT" displayed?

YES Is the color registration sensor cover dirty?

YES A malfunction of the sensor cover front surface cleaning operation of the cleaning blade placed on the back of the shutter occurred. Replace the shutter and the sensor cover to restore cleanability.

NO Are there any problems in shutter opening and closing operation?

YES Replace the shutter. Has the problem been corrected?

YES End.

NO Replace the shutter opening and closing solenoid. Has the problem been resolved?

YES End.

NO Replace the belt unit. Has the problem been corrected?

YES End.

NO Replace the image drum units. Has the problem been resolved?

YES End.

(B)

(B)

- [Is "YELLOW/MAGENTA/CYAN LEFT/RIGHT/HORIZONTAL" displayed?

  YES Replace the belt unit. Has the problem been corrected?

    YES End.

  NO Replace the image drum unit. Has the problem been resolved?

    YES End.

  NO Are there any problems in the gear assys of the image drums, multipurpose tray, belt unit, belt motor etc.?

    YES Replace damaged gear assy(s).

  NO Replace the driver board. Has the problem been corrected?

    YES End.

  NO Are the LED head units connected to the CU board (ARC PWB) properly?

    NO Connect not properly connected LED head unit(s) to the connection board correctly.

  YES Replace the LED head assys after checking cable connection. Has the problem been resolved?

    YES End.

  NO Replace the CU board (ARC PWB) after checking cable connection. Has the problem been corrected?

    YES End.

  NO Is the engine board (RS PWB) connected to the CU board (ARC PWB) properly?

    NO Connect the engine board to the connection board correctly.

  NO Replace the engine board. Has the problem been resolved?

    YES End.

  NO Are the pins of the image drum units connected to the contact assy properly (see figure 5-3)?

    NO Connect not properly connected pins to the contact assy correctly.

  YES Replace the image drum units.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

⑩ Color different from original one

- Are the LED head lenses dirty?

  YES Clean dirty LED head lens(es).

  NO Are the LED head assys connected to the connection board (ARC PWB) properly?

    NO Check the cable connection between not properly connected LED assy(s) and the connection board, and connect them correctly.

  YES Are +5V and +3.3V being output to the CU board (ARC PWB) HEAD connector pins?
  +5V: Pins 16, 18, 20, 22 and 24
  +33.V: Pin 14

    YES Is +5V being output to the CU board (ARC PWB)?

      NO Replace the CU board (ARC PWB).

    YES Replace the LED head assys after checking cable connection. Has the problem been corrected?

      YES End.

    NO Replace the driver board (RSM PWB) after checking cable connection. Has the problem been resolved?

      YES End.

  NO Is 5V being output to the engine board (RSN PWB) POWER connector?
  +5V: Pins 7 and 8

    NO Replace the low voltage power unit after checking cable connection.

  YES Is 24V being output to the engine board (RSN PWB) HVOLT connector pin 15?

    NO Replace the engine board.

  YES Replace the high voltage power unit or the belt cassette assy after checking cable connection. Has the problem been corrected?

    YES End.

  NO Are the pins of the image drum units connected to the contact assy properly (see figure 5-3)?

    NO Connect not properly connected pin(s) to the contact assy correctly.

  YES Replace the imaged drum units.

Note: 1. When replacing the engine board (RSN PWB), extract EEPROM data from it and copy the data onto a new engine board.
2. When the EEPROM on the board cannot be replaced, see section 3.2.2.

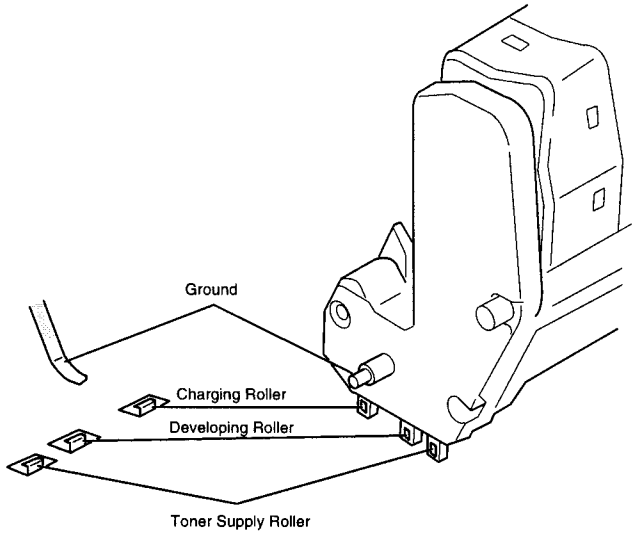


Figure 5.3

Oki Data CONFIDENTIAL

5.6 Fuse Checking

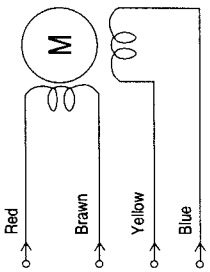
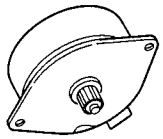
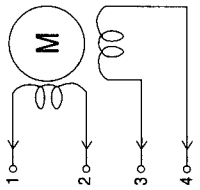
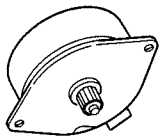
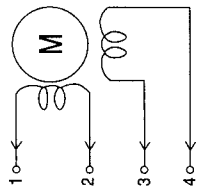
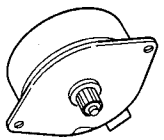
When the following errors occur, that fuse on the high voltage board which is associated with each error is to be checked (see table 5-6).

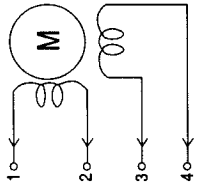
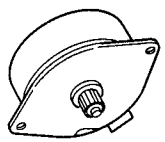
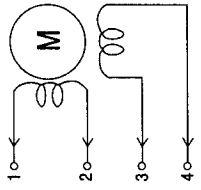
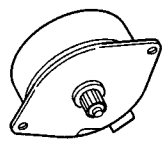
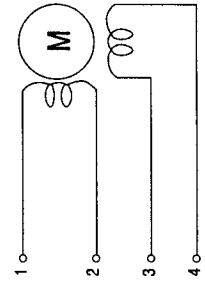
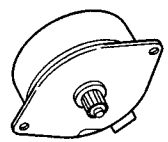
Table 5-6 Fuse Error

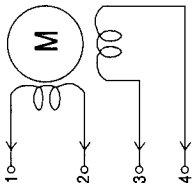
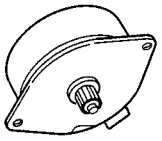
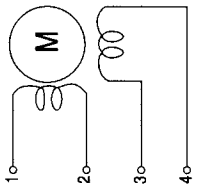
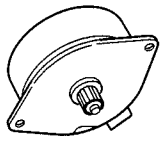
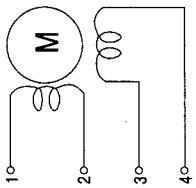
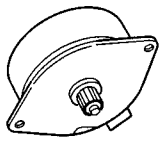
Fuse Name		Error Description	Insert Point
Engine Board (RSN PWB)	F1	M or C toner sensor error	M-ID and C-ID motor 24V
	F2	K toner sensor error	Hop and K-ID motor 24V
	F3	Cover open error	High voltage, fan, Ver and Y-ID 24V
	F4	2nd tray or duplex unit paper jam	2nd tray and duplex 24V
	F5	Paper jam during printing	Belt fuser motor 24V
	F6	No operator panel display	5V sensor system
High Voltage Board	IP102	Cover open error	High voltage 24V

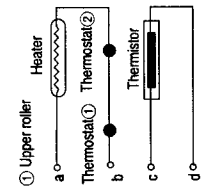
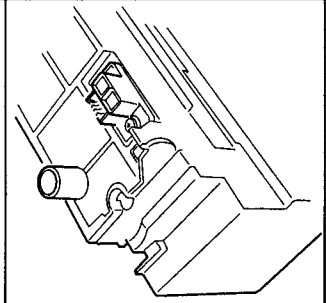
6. CONNECTION DIAGRAM

6.1 Resistance Checks

Unit	Circuit Diagram	Illustration	Resistance
Transport Belt Motor			Between pins 1 and 2: 3.5Ω Between pins 3 and 4: 3.5Ω
Main Motor (Y)			Between pins 1 and 2: 6.0Ω Between pins 3 and 4: 6.0Ω
Main Motor (M)			Between pins 1 and 2: 6.0Ω Between pins 3 and 4: 6.0Ω

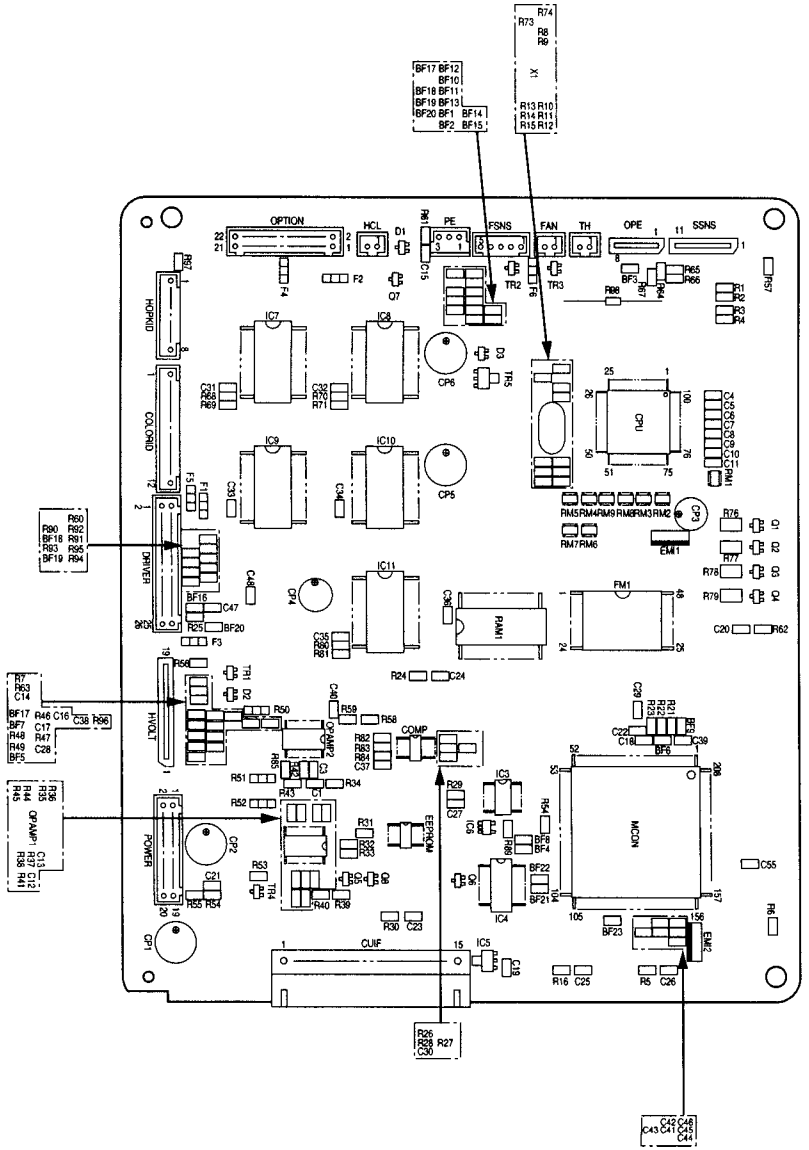
Unit	Circuit Diagram	Illustration	Resistance
Main Motor (C)			Between pins 1 and 2: 6.0Ω Between pins 3 and 4: 6.0Ω
Main Motor (K)			Between pins 1 and 2: 6.0Ω Between pins 3 and 4: 6.0Ω
Fuser Motor			Between pins 1 and 2: 6.0Ω Between pins 3 and 4: 6.0Ω

Unit	Circuit Diagram	Illustration	Resistance
Feeder Motor			Between pins 1 and 2: 3.5Ω Between pins 3 and 4: 3.5Ω
Duplex Motor			Between pins 1 and 2: 3.5Ω Between pins 3 and 4: 3.5Ω
2nd tray Feeder Motor			Between pins 1 and 2: 3.5Ω Between pins 3 and 4: 3.5Ω

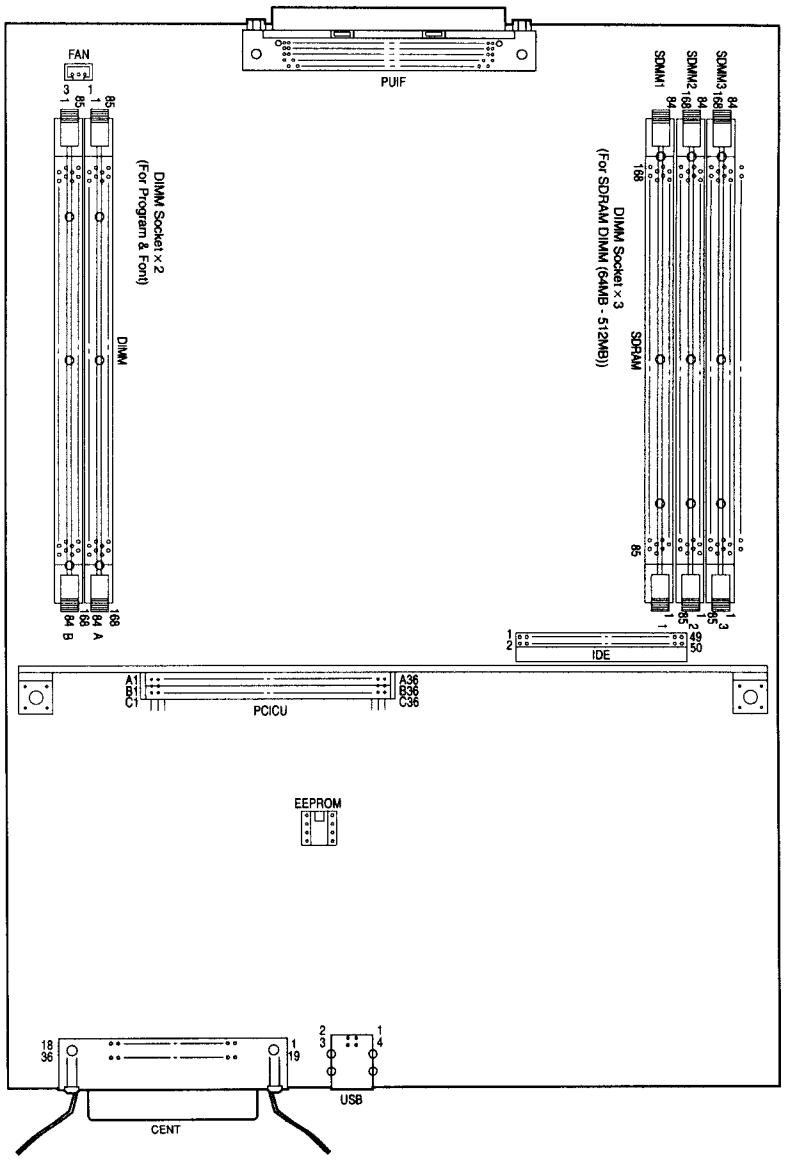
Unit	Circuit Diagram	Illustration	Resistance
Fuser Unit			1. Upper Roller Side Between pins "a" and "b": Between pins "c" and "d": 363k Ω (at 25°C) Between pins "e" and "f": Open

6.2 Program/Font ROM Layouts

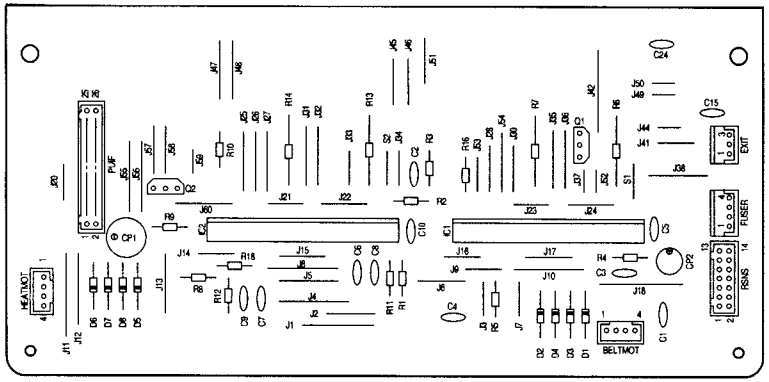
(1) Print Engine Controller PWB (RSN-1 PWB)



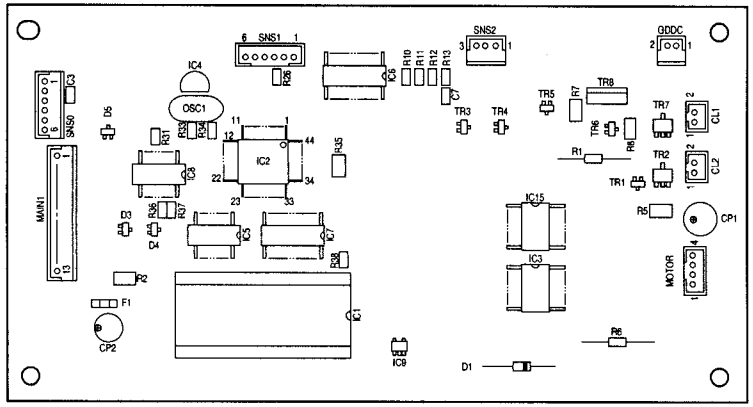
(2) Main Controller PWB (ARC PWB)



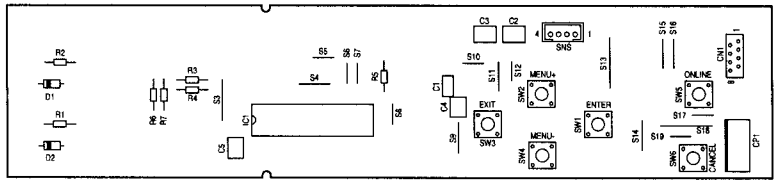
(3) Driver PWB (RSM PWB)



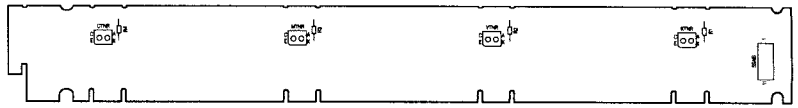
(4) Duplex Controller PWB (V7X PWB)



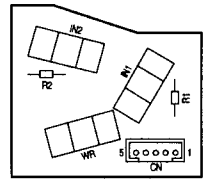
(5) Control Panel PWB (RSP PWB)



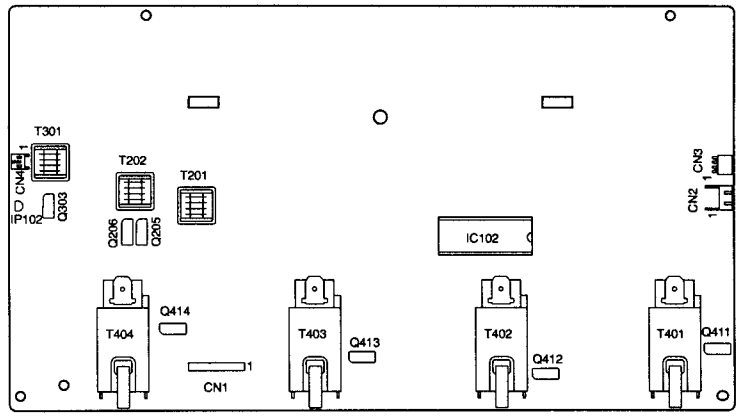
(6) Toner Low Sensor PWB (PRD-PWB)



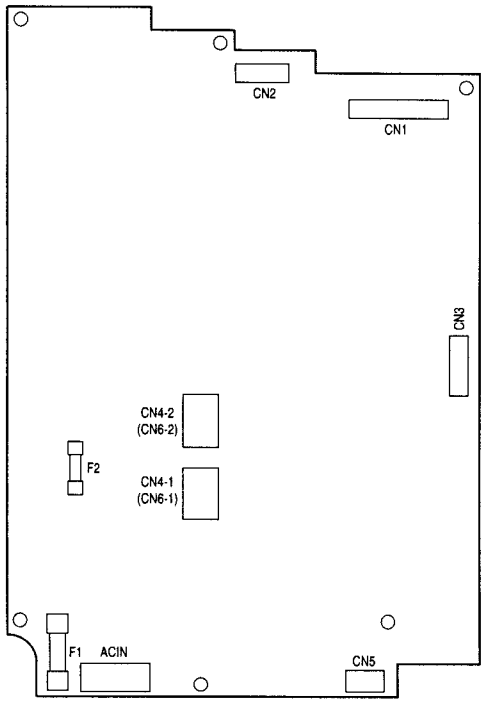
(7) Entrance Sensor PWB (RSF PWB)



(8) High voltage power supply PWB



(9) Low voltage power supply PWB



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7. PARTS LIST

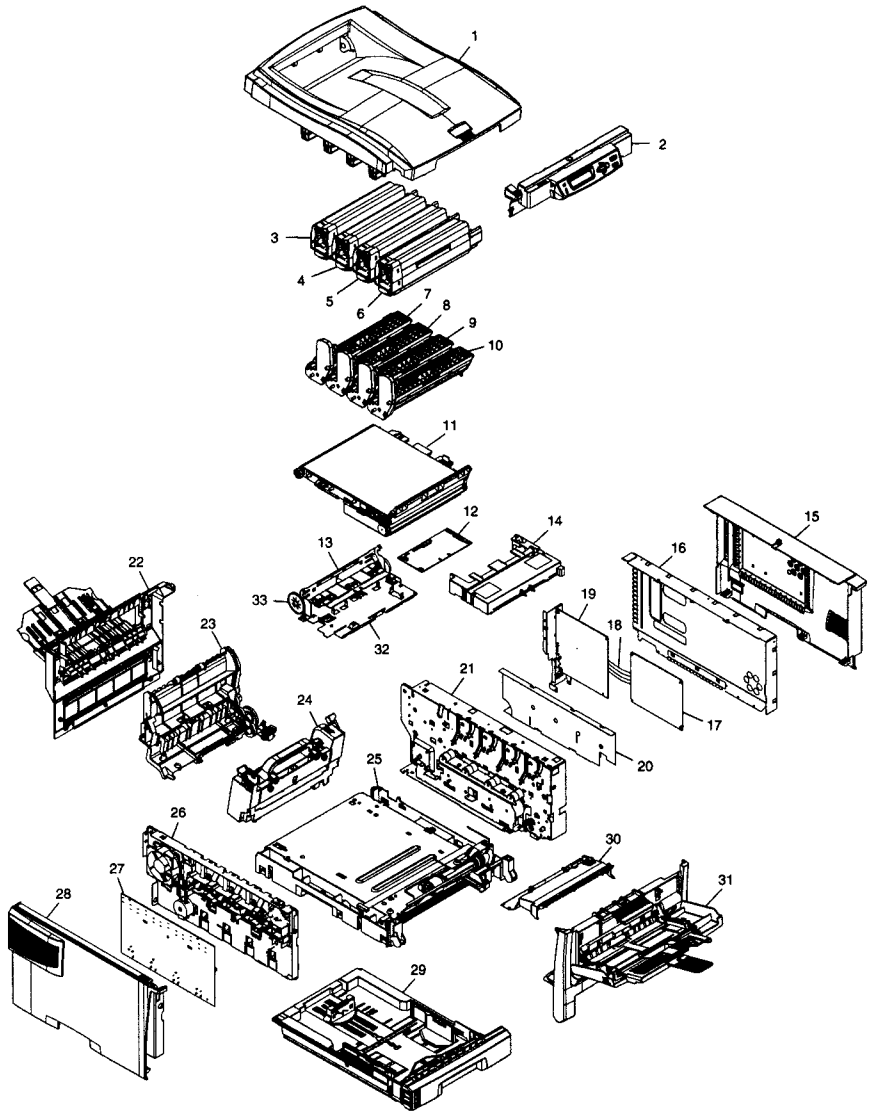

Figure 7-1 Parts Layout

Table 7-1

Part_Layout

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42074501	Top Cover Assy	1				
2	42067501	Control Panel Assy	1				
3	42127415	Toner-C	1	-	-	-	
4	42127414	Toner-M	1	-	-	-	
5	72127413	Toner-Y	1	-	-	-	
6	42127416	Toner-K	1	-	-	-	
7	42126615	ID-C	1	-	-	-	
8	42126614	ID-M	1	-	-	-	
9	42126613	ID-Y	1	-	-	-	
10	42126616	ID-K	1	-	-	-	
11	42158704	Belt-Unit	1	-	-	-	
12	42135601	Board-RSM	1	2	4	8	
13	42065101	Sensor-Assy-Color-Regist	1				
14	42066901	Cover-Driver	1	1	2	4	
15	42079601	Cover-Assy-SideR	1	1	2	4	
16	42294101	Plate-Assy-Shield (GDI)	1	1	2	4	
17	42135501	Print Engine Controller PWB	1	2	4	8	
18	42141601	CONN Cord	1	2	4	8	
19	42373501	Controler Board CU (GDI)	1	3	6	12	
20	42078701	Film-Insulation	1	1	2	4	
21	42053501	Plate-Assy-Side-R	1				
22	42077501	Cover Assy-Rear	1				
23	42063001	Eject-Assy	1				
24	42158605	Fuser-Unit	1				
25	42049501	Base-Assy	1				
26	42060001	Plate-Assy-Side-L	1				
27	41978801	Power Unit High Voltage	1	2	4	8	
28	42465401	Cover-SideL	1				
29	42087001	Cassette Assy	1	1	2	4	
30	42061501	Cover Assy-Hopping	1				
31	42069001	Feeder-Unit	1				
32	42062101	Plate-Driver	1	1	2	4	
33	42062401	Gear-Idle-Belt	1	2	4	8	

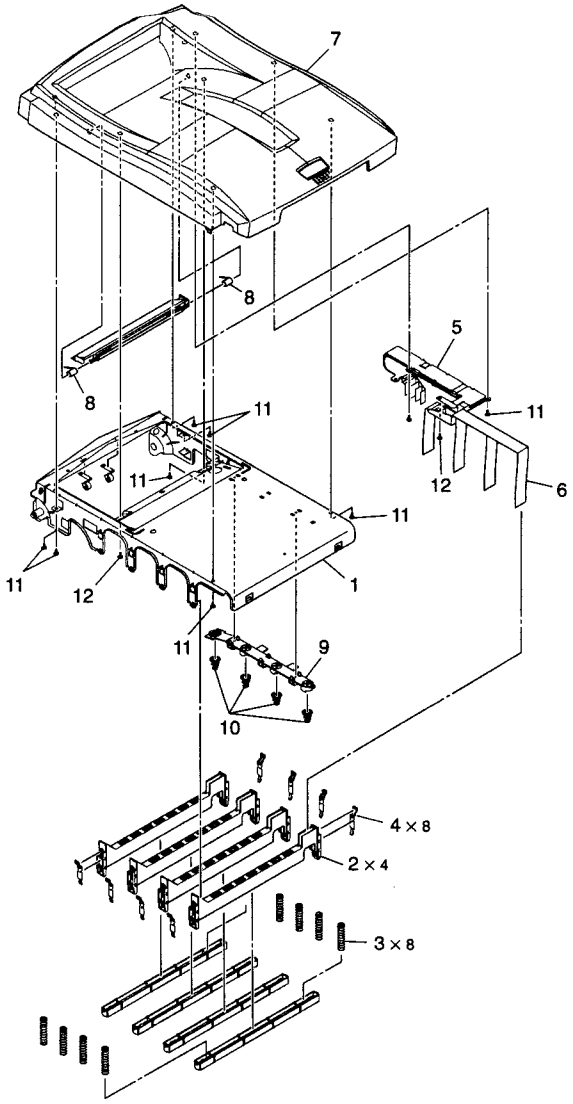

Figure 7-2 Top_Cover_Assy

Table 7-2

Top_Cover_Assy

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42074601	Plate-Inner (Caulking)	1	1	2	4	
2	42075001	Holder-Head	4	1	2	4	
3	42075101	Spring-Head	8	1	2	4	
4	42075301	Plate-FG-Head	8	1	2	4	
5	42075501	Cable-Assy-Head	1				
6	42076201	Cover-Cable	1	1	2	4	
7	42076301	Cover-Assy-Top (Sub)	1				
8	42076601	Roller Assy-Idle (FD)	2	2	4	8	
9	42373601	Holder-SP (Inner)	1				
10	42392501	Spring-Compression (ID)	4	1	2	4	
11	4PB4083-2500P008	Tapping Screw B2	8	-	-	-	
12	4PB4013-3100P006	Cup Screw A	1	-	-	-	

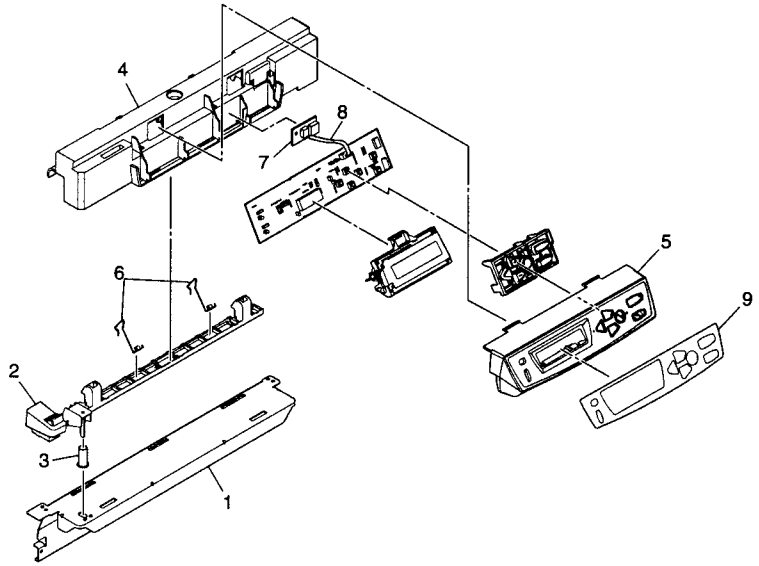

Figure 7-3 Frame_Assy-OP

Table 7-3

Frame_Assy-OP

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42067601	Plate-Front	1	1	2	4	
2	42067701	Lever-Lock (Top)	1	1	2	4	
3	42067801	Spring-Compression (Lock)	1	1	2	4	
4	42067901	Frame-OP panel	1	1	2	4	
5	42068001	Cover-Assy -OP	1	2	4	8	
6	42293201	Spring-Torsion (FG)	2	1	2	4	
7							
8							
9							

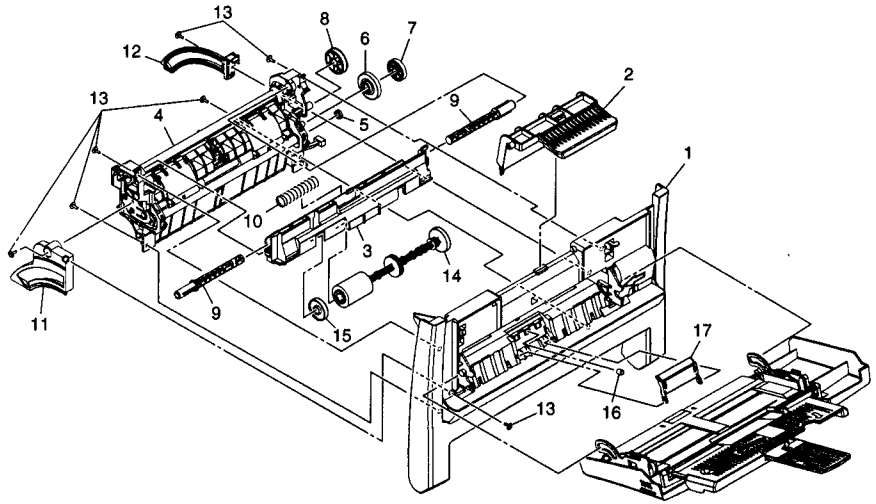

Figure 7-4 MPT_Base_Assy

Table 7-4

MPT_Base_Assy

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42069201	Cover Assy-Front	1	1	2	4	
2	42069601	Lever-Release-F	1	1	2	4	
3	42070001	Guide-Assy-Top	1				
4	42070501	Feeder-Assy-Resist	1	2	4	8	
5	42072201	Gear-Pressure	1	2	4	8	
6	42072401	Gear-Regist-L (24-54)	1	2	4	8	
7	42057601	Gear-Z42	1	2	4	8	
8	42072501	Gear-Idle-MPT (26-50)	1	2	4	8	
9	42072701	Post-Slide	2	1	2	4	
10	42072801	Spring-Release-F	2	1	2	4	
11	42074001	Stay-Front-L	1	1	2	4	
12	42074101	Stay-Front-R	1	1	2	4	
13	4PB4083-2500P008	Tapping Screw B2	7	-	-	-	
14							
15							
16		Spring	1				
17		Frame Separator	1				

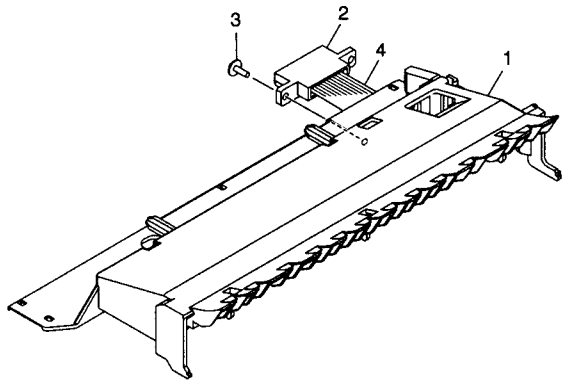

Figure 7-5 Cover_Assy-Hopping

Table 7-5

Cover_Assy-Hopping

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1			1				
2			1				
3			1				
4			1				

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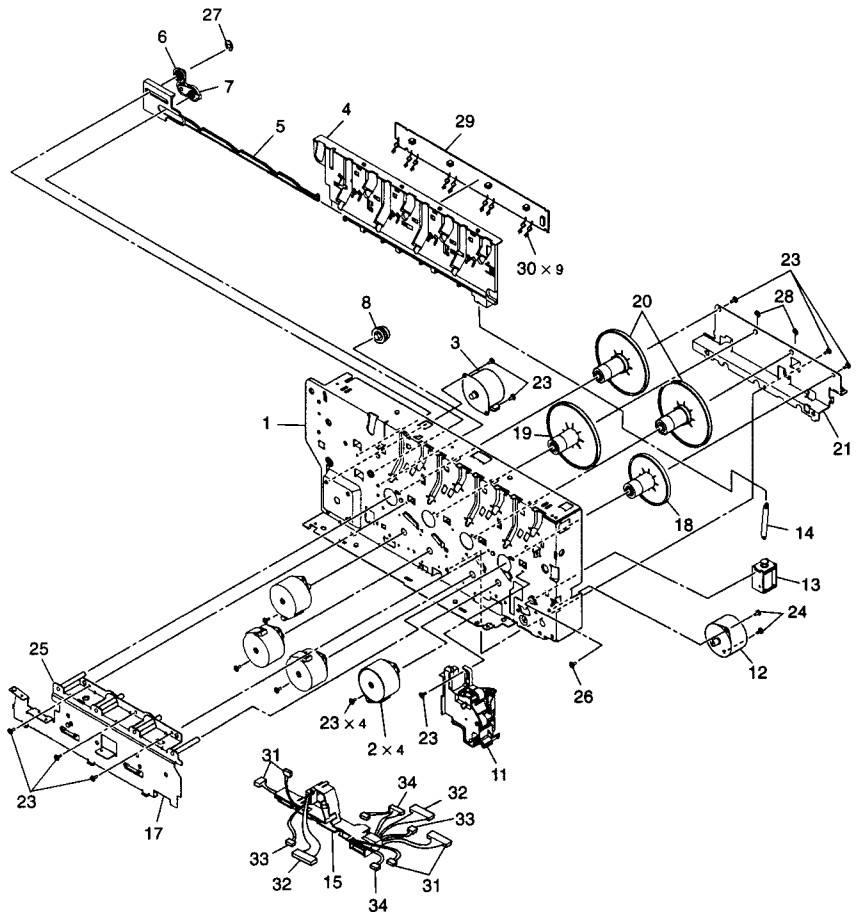

Figure 7-6 Plate_Assy-Side_R

Table 7-6

Plate_Assy-Side_R

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42053801	Plate-Side-R (Caulking)	1	1	2	4	
2	42054501	Motor-Pulse-ID (K)	4	2	4	8	
3	42054801	Motor-Pulse-Fuser	1	2	4	8	
4	42054901	Guide Assy-Side-R	1				
5	42055501	Link-Liftup-R	1	2	4	8	
6	42055701	Gear-Planet	1	2	4	8	
7	42055901	Gear Assy-Planet-R	1	2	4	8	
8	42057101	Gear-Idle-Liftup	1	2	4	8	
9							
10							
11	42057301	Gear Assy-HP	1	2	4	8	
12	42058201	Motor-Resist	1	2	4	8	
13	42058301	Solenoid	1	2	4	8	
14	42058401	Spring-Solenoid	1	1	2	4	
15	42058501	Guide-Cable-F	1				
16							
17	42058601	Bracket-Inner (Caulking)	1	1	2	4	
18	42059001	Gear-Idle-Drum-K	1	2	4	8	
19	42059101	Gear-Idle-Drum-M	1	2	4	8	
20	42059201	Gear-Idle-Drum-YC	2	2	4	8	
21	42059301	Bracket-Outer	1	1	2	4	
22							
23	4PB4013-3100P006	Cup Screw A	13	-	-	-	
24	4PB4083-2500P008	Tapping Screw B2	4	-	-	-	
25	42437301	Plate-Lockout-ID	1				
26	PSW3-4C	Screw	1	-	-	-	
27	RE3-SK	Ring	1	-	-	-	
28	RE4-SK	Ring	2	-	-	-	
29	42135701	Board-PRD	1	2	4	8	
30	42055201	Spring-Contact-TL	9	1	2	4	
31	42141401	CONN Cord-JST12P-JST4PX3	1	2	4	8	
32	42141501	CONN Cord-JST26P-JST26P	1	2	4	8	
33	42303501	CONN Cord-JST2P-JST2P	1	2	4	8	
34	42141301	CONN Cord-JST8P-JST4PX2	1	2	4	8	

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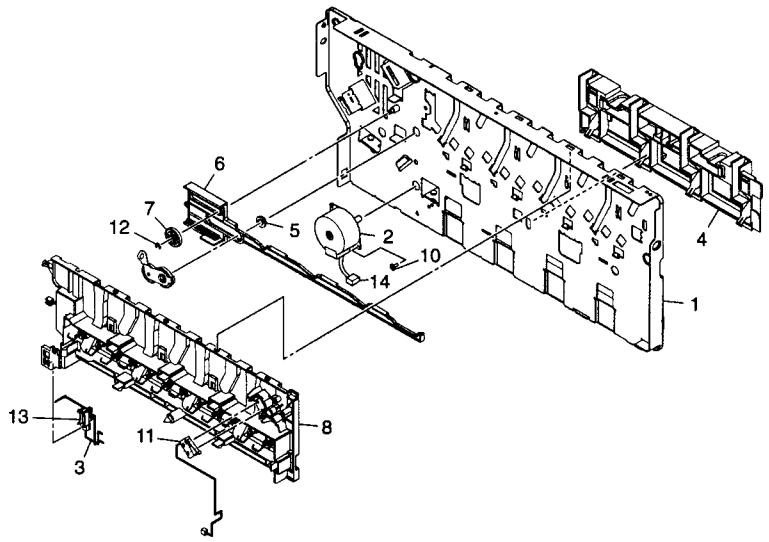

Figure 7-7 Plate_Assy-Side_L

Table 7-7

Plate_Assy-Side_L

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42060101	Plate-Side-L (Caulking)	1	1	2	4	
2	42054601	Motor-Pulse-ID-Belt	1	2	4	8	
3	42141701	CONN Cord-JST4P-JST4P	1	2	4	8	
4	42060401	Contact-Assy	1	2	4	8	
5	42060701	Bush	1	1	2	4	
6	42060801	Link-Liftup-L	1	2	4	8	
7	42055701	Gear-Planet	1	2	4	8	
8	42060901	Guide Assy-Side-L	1	2	4	8	
9							
10	4PB4013-3100P006	Cup Screw A	1	-	-	-	
11	42025701	Micro switch-Assy	1	2	4	8	
12	RE3-SK	Ring	1	-	-	-	
13							
14	421417-1	CONN	1				

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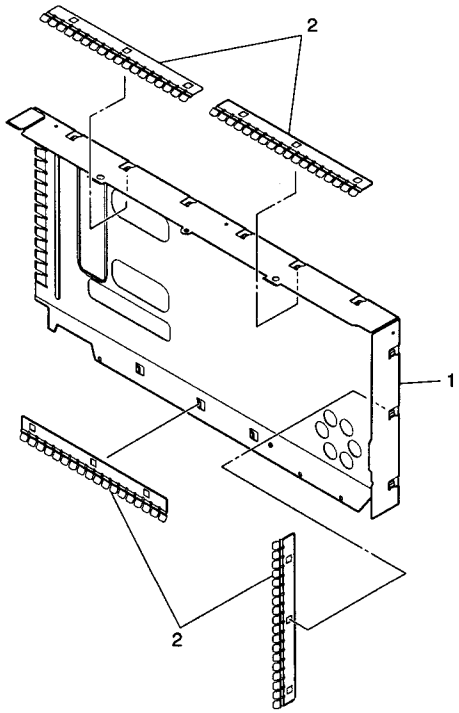

Figure 7-8 Plate_Assy-Shield

Table 7-8

Plate_Assy-Shield

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42135101	Plate-Side (GDI)	1				
2	42079301	Plate_Contact-Shield	4	-	-	-	

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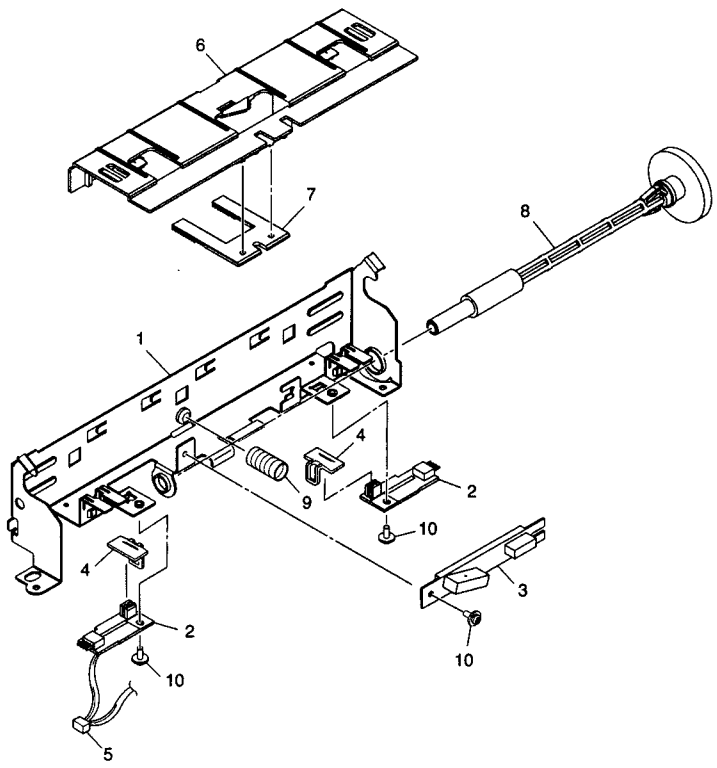

Figure 7-9 Sensor_Assy-Regist

Table 7-9

Sensor_Assy-Color_Resist

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42065201	Plate-Sensor-C Resist	1	1	2	4	
2	41258601	Board-Z71	2	3	6	12	
3	5654200P0001	GP2TCS SENSOR-Dencity	1	3	6	12	
4	42220901	Plate_Guard-sensor	2	1	2	4	
5	42141801	CONN Cord-JST14P MOLEX5PJST4PX2	1	2	4	8	
6	42065301	Cover-C.Resist (Adhesive)	1	1	2	4	
7	42065701	Gear-Cover-Sensor (Rack)	1	2	4	8	
8	42065801	Shaft-Cover-Sensor	1	2	4	8	
9	42065901	Spring-Cover-Sensor	1	1	2	4	
10	4PB4013-3100P006	Cup Screw A	3	-	-	-	

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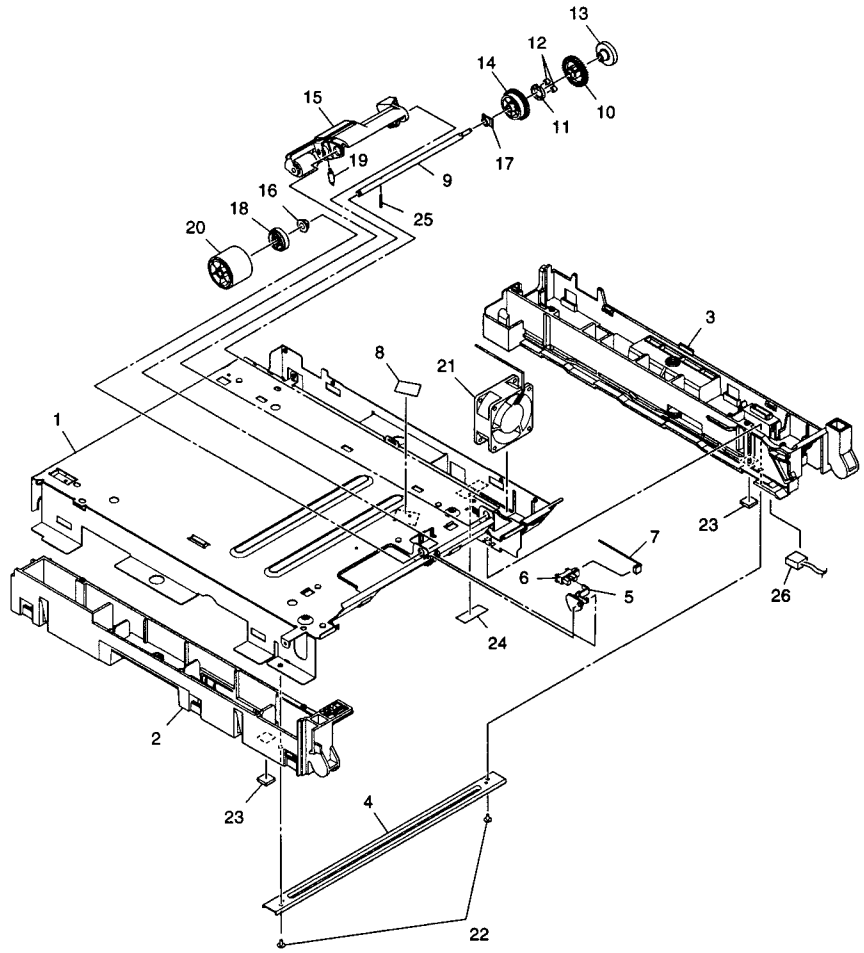

Figure 7-10 Plate_Assy-Base

Table 7-10

Plate_Assy-Base

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42049601	Plate-Base	1	1	2	4	
2	42049701	Guide Assy-Cassette-L	1	1	2	4	
3	42050101	Guide Assy-Cassette-R	1	1	2	4	
4	42050301	Plate-Beam	1	1	2	4	
5	42050401	Lever-End	1	1	2	4	
6	40135301	Photo-Interrupter	1	2	4	8	SNS-END
7	42141101	CONN Cord-AMP3P-AMP3P	1	2	4	8	Code4(Cable-P-END)
8	4YC4061-1026P001		1				L=30mm
9	42050701	Shaft-Hopping	1	1	2	4	
10	42050801	Stopper-HP	1	2	4	8	
11	42050901	Holder-Planet-HP	1	2	4	8	
12	42051001	Gear-Planet (Z12)-HP	2	2	4	8	
13	42051101	Gear-Z24-50-HP	1	2	4	8	
14	42051201	Stopper-Z45-48-HP	1	2	4	8	
15	42051401	Bracket-Assy-Sub	1	2	4	8	
16	41513401	Bearing-Metal	1	1	2	4	
17	4PP4083-6022P002	BEARING A	1	1	2	4	
18	42052301	Gear-Hopping (Z38)-HP	1	2	4	8	
19	42052501	Spring-Sub	1	1	2	4	
20	42052601	Roller Assy-Hopping	1	3	6	12	
21	42368501	Motor-Fan (60)PowL	1				
22	4PB4013-3100P006	Cup Screw A	2				
23	42423301	Plate-Patch	2				
24	42104603	Tape AL Film	1				L=35mm
25	NK2-16SUS	Pin	1	-	-	-	
26	2233013P01	Connector (9715B-10Z02)	1	2	4	8	

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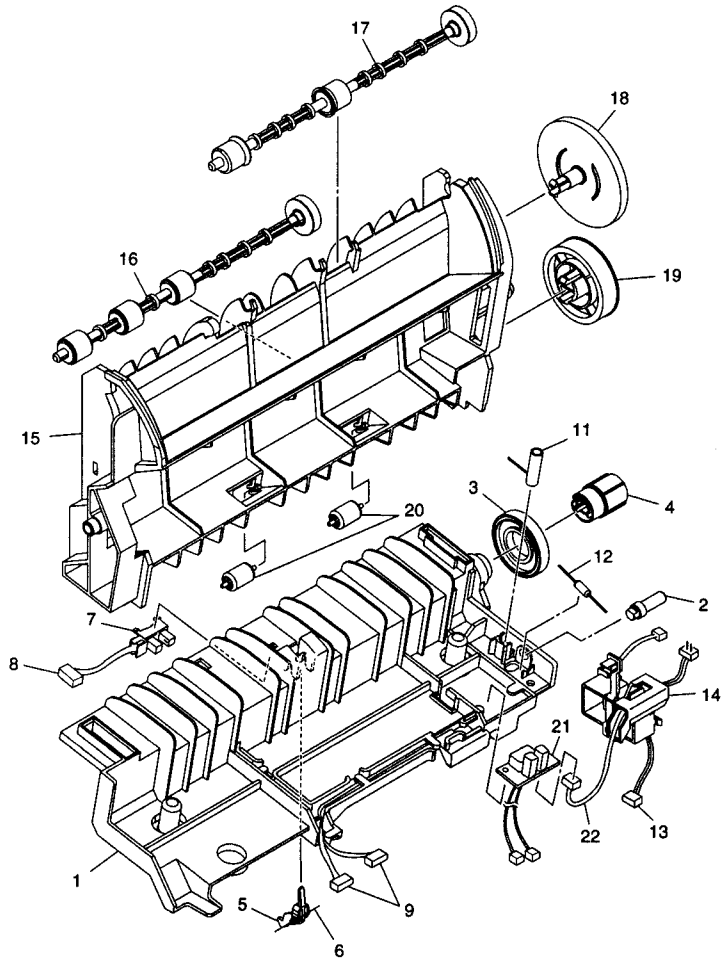

Figure 7-11 Eject_Assy

Table 7-11

Guide_Assy-Eject-L

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42063201	Guide-Eject-Lower	1	2	4	8	
2	42278501	Post-Gear-Idle-Heat	1	1	2	4	
3	42063801	Gear-Idle-Exit (Z33)	1	2	4	8	
4	42221001	Post-G.E.L.-Z33	1	1	2	4	
5	42063301	Lever-Eject-Sensor	1	2	4	8	
6	40386501	Spring-SNS (F/R)	1	1	2	4	
7	40135301	Photo-Interrupter	1	1	2	4	
8	42141101	CONN Cord-AMP3P-AMP3P	1	2	4	8	
9	42142001	CONN Cord-AMP4P-AMP4P	1	2	4	8	
10	42142101	CONN Cord-AMP2P-JST3P	1	2	4	8	
11	42063601	Spring-FG	1	1	2	4	
12	3263124K0107	GS1/2A100MWK-T52 RES-MET solid - Q	1	1	2	4	
13	42141702	CONN Cord-JST4P-JST4P	1				
14	42059401	Guide-Cable-R	1				
15	42064401	Guide-Eject-Upper	1				
16	42308001	Shaft Assy-Eject (FU)	1	1	2	4	
17	42308101	Shaft Assy-Eject (FD)	1	1	2	4	
18	42064501	Gear-Idle-Exit (Z58)	1				
19	42064701	Gear-Idle-Exit (Z41)	1				
20	42278301	Roller-Sub-G.E.U.	2				
21							
22							

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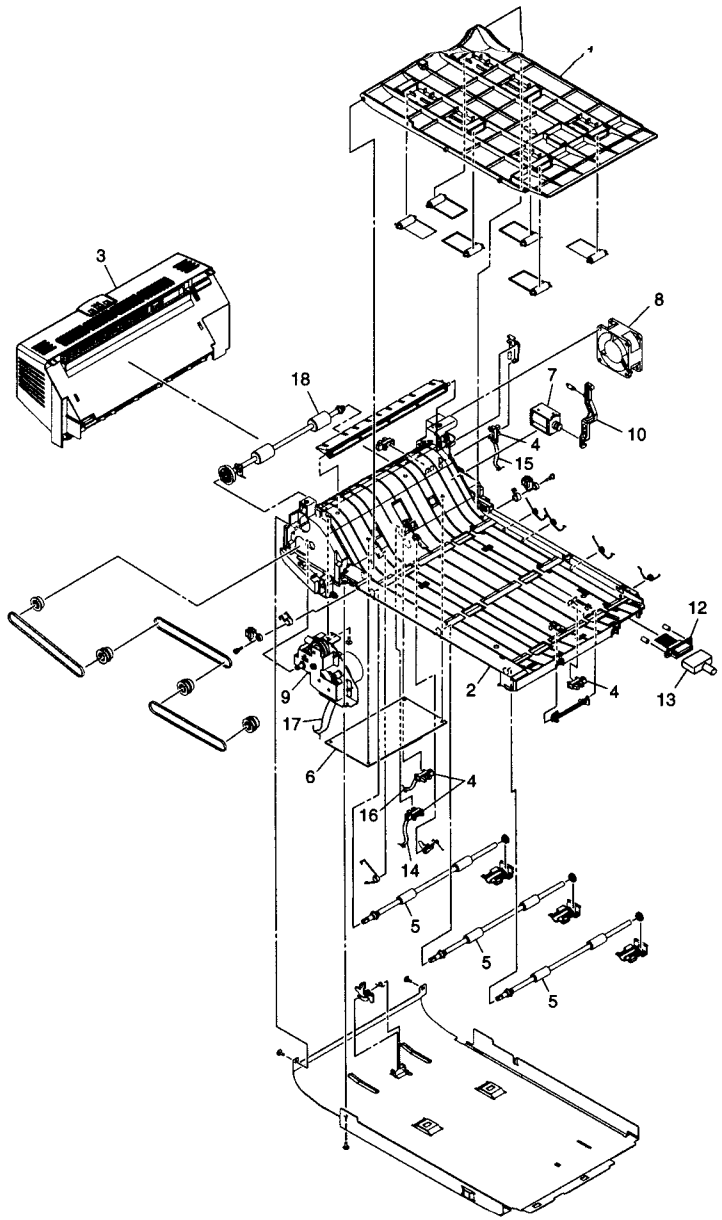

Figure 7-12 Duplex Unit

Table 7-12

Duplex Unit

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42160301	Frame-Assy-Upper	1	1	2	4	
2	42160401	Frame-Assy-Lower	1	1	2	4	
3	42160501	Frame-Assy-Rear	1	1	2	4	
4	40135301	Photo-Interrupter	5	1	2	4	
5	42194801	Roller-Feed (H)	3	1	2	4	
6	41780309	Board-V7X	1	2	4	8	
7	42058302	Solenoid	1	1	2	4	
8	42396201	Motor-Fan	1	1	2	4	
9	42160601	Gear-Assy	1	1	2	4	
10	42162001	Gear-Assy-Clutch	1	2	4	8	
11	42058201	Motor-Regist	1	1	2	4	
12	2233014P0110	Connector-Plug	1	1	2	4	
13	42142601	Connection-Cord	1	1	2	4	
14	42142801	Connection-Cord	1	1	2	4	
15	42142701	Connection-Cord	1	1	2	4	
16	42141104	Connection-Cord	1	1	2	4	
17	42141705	Connection-Cord	1	1	2	4	
18	42194701	Roller-Feed (Rv)	1	1	2	4	

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APPENDIX A INTERFACE SPECIFICATIONS

1. Parallel Interface Specifications

1.1 Parallel Interface

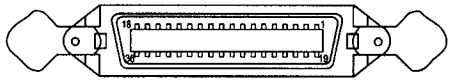
Item	Description
Mode	Compatibility mode, Nibble mode, ECP mode
Data bit length	8 bits: Compatibility mode, 4bits: Nibble mode,9 bits: ECP mode

1.2 Parallel Interface Connector and Cable

1) Connector

Printer side: 36-pin receptacle
Type 57LE-40360-12 (D56) (made by Daiichi Denshi) or equivalent

Cable side: 36-pin plug
Type 57FE-30360-20N (D8) (made by Daiichi Denshi) or equivalent



Connector Pin Arrangement Viewed from Cable Side

2) Cable

Cable length: 1.8 m max.
(A shielded cable composed of twisted pair wires is recommended for noise prevention.)

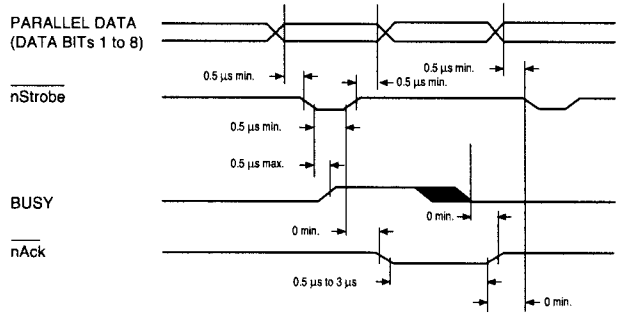
1.3 Parallel Interface Level

LOW: 0 V to +0.8 V
HIGH: +2.4 V to 5.0 V

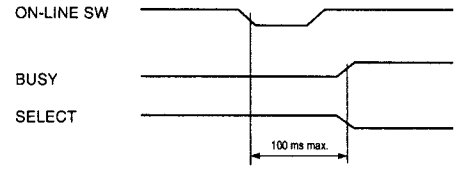
1.4 Timing Charts

Compatible mode

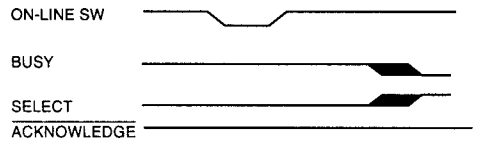
a) Data receiving timing



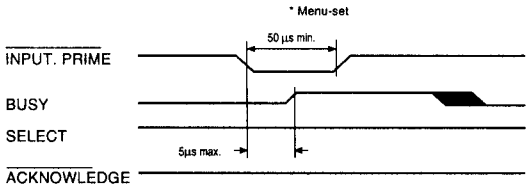
b) On-line (off-line switching timing by ON-LINE SW)



c) Off-line (on-line switching timing by ON-LINE SW)



d) nInit timing (invalid by default)



1.5 Parallel I/F Signals

Table 8-1 shows interface signal names and pin numbers.

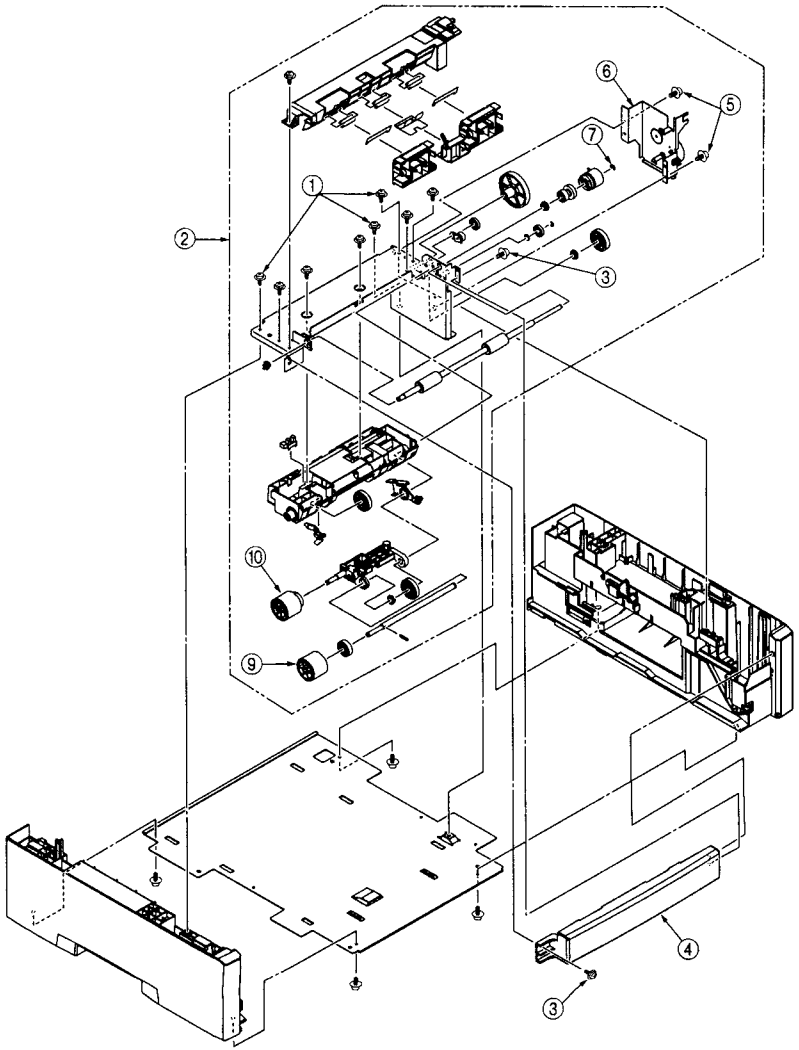
Table 8-1 Signals

Pin No.	Signal Name	Signal Direction	Functions
1	Nstrobe (HostClk)	→PR	Pulse for reading data in at trailing edge.
2	DATA 1		
3	DATA 2		
4	DATA 3		8-bit parallel data.
5	DATA 4	→PR	Each signal is HIGH when data is logical 1 and
6	DATA 5		LOW when it is logical 0.
7	DATA 6		
8	DATA 7		
9	DATA 8		
10	nAck (PtrClk)	←PR	Indicates the completion of data reception.
11	Busy (PtrBusy)	←PR	Indicates whether the printer is ready for receiving data. Data cannot be received while the signal is HIGH.
12	PError (AckDataReq)	←PR	Indicates paper error when held HIGH.
13	Select (Xflag)	←PR	HIGH without exception when the parallel interface is enabled.
14	NAutoFd (HostBusy)	→PR	Used in bidirectional communication.
15	-	-	Unassigned.
16	GND	-	Signal ground.
17	FG	-	Chassis ground.
18	+5V	←PR	Used for supplying +5V. Power cannot be supplied to the outside of the printer.
19 ~ 30	GND	-	Signal ground.
31	NInit (nInit)	→PR	Initializes the printer when held LOW.
32	NFault (nDataAvail)	←PR	LOW during alarm.
33	GND	-	Signal ground.
34	-	-	Unassigned.
35	HILEVEL	←PR	Pulled up to +5V at 3.3KΩ inside the printer.
36	Nselectin (IEEE 1284 active)	→PR	Used in bidirectional communication. Low without exception in compatible mode.

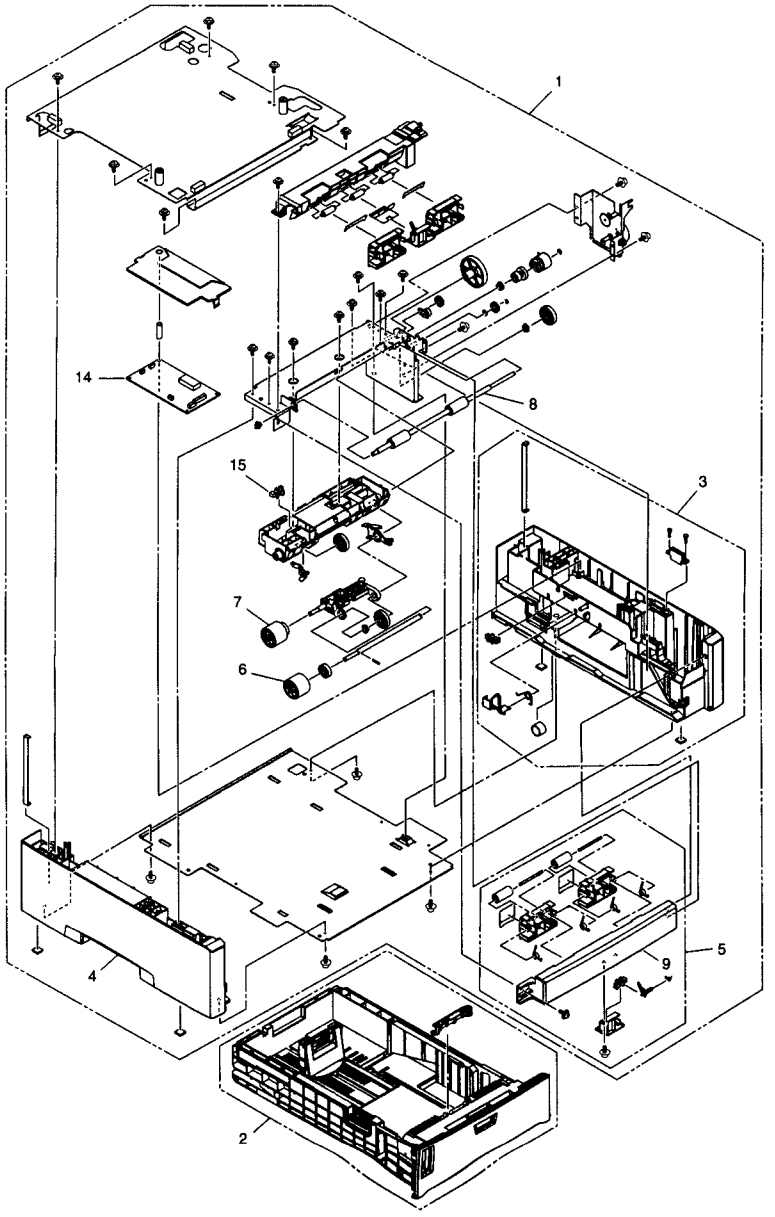
Note: Parenthesized signal names are used in nibble mode.
Only functions in compatible mode are listed.
This printer supports the IEEE std 1284-1994 nibble mode. Note that, when used with personal computers or cables that do not comply with the standards, the printers may exhibit unpredictable behavior.

1.2 Frame Assy- Hopping

(1) Remove the PCB (see section 1.1).
(2) Remove the three screws ① to uninstall the hopping assy ②.
(3) Unscrew the two screws ③ to remove the cover assy - front ④.
(4) Unscrew the two screws ⑤ to remove the motor ⑥.
(5) Remove the E ring ⑦ to remove the clutch ⑧.
(6) Remove the roller assy - hopping ⑨.
(7) Remove the roller assy - feed ⑩.



2. PARTS LIST



2. Universal Serial Bus (USB) Interface Specifications

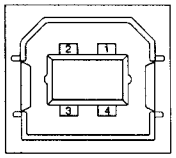
2.1 USB Interface

(1) Basic specifications
Conforms to USB specification, revision 1.1.
(2) Transmission mode
Full speed (max. 12 Mbps + 0.25%)
(3) Power Control
Self-power device

2.2 USB Interface Connector and Cable

(1) Connector
Printer side: Type B receptacle
Upstrem port
UBB-4R-D14T-1 (made by JST) or equivalent

Connector pin layout



Cable side: Type B plug

(2) Cable
Cable length: 5 m max. (cable compliant with USB specification, revision 1.1)
(A shielded cable must be used.)

2.3 USB Interface Signals

	R1	Function
1	Vbus	Power Supply (+5V) (red)
2	D -	Data transmission (white)
3	D +	Data transmission (green)
4	GND	Signal ground (black)
Shell	Shield	

APPENDIX B 2ND/3RD TRAY MAINTENANCE

1. Parts Replacement

1.1 PCB

(1) Unscrew the six screws ① to remove the plate-top ②.
(2) Remove the cover-side R ③.
(3) Remove the connectors (at five places), then uninstall the board ④.

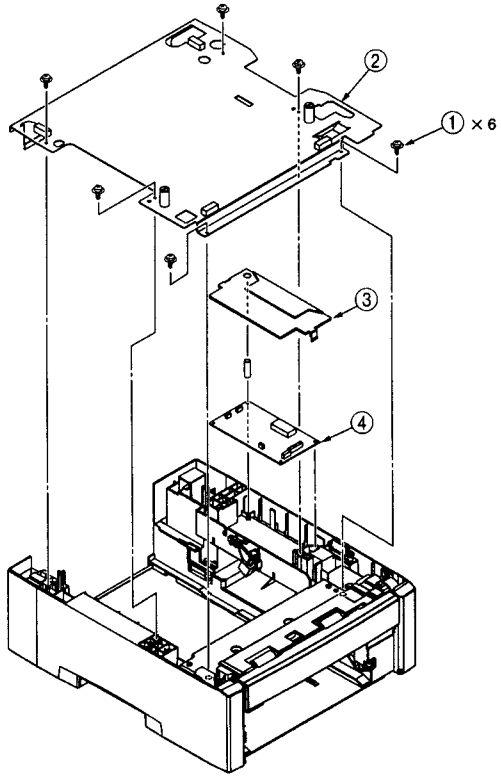


Table 2-1 2nd/3rd Tray

No.	Parts No.	Name	Q'ty /Unit	Recommended Q'ty/Year			Remarks
				per 500	per 1000	per 2000	
1	42158504	Second Tray Unit	1	-	-	-	
2	42139801	Cassette Assy.	1	1	2	4	
3	42136601	Guide Assy.- Cassette-L	1	1	2	4	
4	42136801	Guide Assy.- Cassette-R	1	1	2	4	
5	42137101	Frame Assy.-Hopping	1	2	4	8	
6	42052601	Roller Assy.-Hopping	1	2	4	8	
7	40313201	Roller Assy.-Feed	1	1	2	4	
8	41400001	Shaft-Roller	1	1	2	4	
9	42138601	Cover Assy.-Front	1	2	4	8	
10	41438401	Frame-Separation Assy.	1	2	4	8	
11	41439401	Spring-Separation	2	2	4	8	
12	42058201	Motor-Regist	1	2	4	8	
13	42197702	Feeder Cluch	1	2	4	8	
14	41780308	Board-V7X	1	3	6	12	
15	40135301	Photo-Interrupter	3	2	4	8	
16	2233014P0100	Connector-Plug	1	1	2	4	
17	42142201	Connection-Cord	1	1	2	4	
18	42141102	Connection-Cord	1	1	2	4	
19	42141704	Connection-Cord	1	1	2	4	
20	42142802	Connection-Cord	1	1	2	4	